THE ASSESSMENT OF THE MENTAL HEALTH SYSTEM OF THE CALIFORNIA YOUTH AUTHORITY

Report to Governor Gray Davis

Prepared by:

Principal Investigator: HANS STEINER, M.D.

Co-Principal Investigator: Keith Humphreys, Ph.D.

Project Manager: Allison Redlich, Ph.D., TCWF-VPI staff

Research Assistants: Melissa Silverman, B.A., Amy Campanaro, M.A., TCWF – VPI Fellow

Consultants: John Kelly, Ph.D., Adolescent Substance Abuse

Sue DiMiceli, M.A., Programming, Analysis and Statistics.

Helena Kraemer, Ph.D., Professor of Biostatistics and Research Design.

December 31, 2001

Acknowledgements: This report was supported by a grant to Dr. Steiner from the CYA. The studies reported herein were supported by grants to Dr. Steiner from The California Wellness Foundation – Violence Prevention Initiative, The Eucalyptus Foundation, The Trinity Family Services, and the National Institute of Mental Health. The Treatment Needs Assessment was supported in part by a grant to Drs. Rudy Haapanen (CYA) and Hans Steiner from the National Institute of Justice. We wish to especially acknowledge the support of members of the CYA Research Division: Dr. Haapanen, Lee Britton, Sue Brooks, Russell Forney, Asvi Phuong, and the dedicated staff of the camps and institutions of the state. Without whom this report would not have been possible.

Table of Contents

Tables and Figures

Tables

Figures

Abstract

This report is the product of a 5-month project requested and funded by the California Youth Authority. Objectives: 1. To review the CYA Treatment Needs Assessment (TNA) to understand the prevalence of mental health, sex offender and drug and alcohol treatment needs within the current ward and parolee population. 2. To review the current screening procedure and suggest possible improvements leading to better identification and service delivery 3. To review existing services in the CYA and suggest improvements based on best practices nationwide. 4. To submit a detailed plan identifying existing deficiencies and make suggestions for improvements. Methods: Dr. Hans Steiner and members of his laboratory (Department of Psychiatry, Stanford University School of Medicine) have been involved in clinical systems and research consultation with the CYA for the past 15 years. We participated in constructing the currently existing screening procedure and have been active partners in designing studies which examine the mental health issues in this difficult population. This study utilized established data from the CYA to examine the prevalence of the most common mental health problems. We then examined existing resources within the system and formed appropriate recommendations from existing national practice parameters to configure optimal and cost efficient services within the CYA. We utilized contacts with administrators, mental health clinicians and CYA researchers to achieve these goals. Results: In regard to Objective 1, we found high rates of psychopathology and high rates of comorbidity. In regard to Objective 2, we discovered that the current screening package is not optimally cost effective and we recommend that one questionnaire be eliminated. In regard to Objective 3, we found that all YA institutions were understaffed, modern psychopharmacology needed to be implemented, and that all institutions have substantial numbers of wards who are comorbid. Additionally, we found there to be an organizational culture not conducive to mental health treatment, a lack in continuity of care, and external forces that cause staff to use their time ineffectively. In regard to Objective 4, we recommend treating the most prevalent problems which have evidence-based, tested treatments available, and which have a very high chance of producing positive outcomes in terms of mental health as well as criminal recidivism. We also recommend creating contracted arrangements with other state entities, such as the Department of Mental Health, hiring more psychiatrists, psychologists and masters levels persons. Finally we provide estimates for the number of beds needed in ITP, SCP, and general population programs. Overall, the maximization of existing resources is a good first step in achieving improvement in the system. Discussion: The existing problems in the CYA should be addressed in a phasing approach. All phases are to start simultaneously, but will have different time frames to reach completion. *Phase 1*: Realignment and maximization of existing resources (6 months). *Phase 2*: Creating centers of excellence and foci for intervention. Selection of one or two target areas for implementation of cutting edge mental health treatment programs best on evidence based medical practice. (Substance Abuse and Dependence, Internalizing Disorders). (18 months). This will require the augmentation of existing resources. *Phase 3*: Rethinking of the current configuration of juvenile justice and mental health services in the state, leading to a maximally effective and cost contained model system of care (18 months).

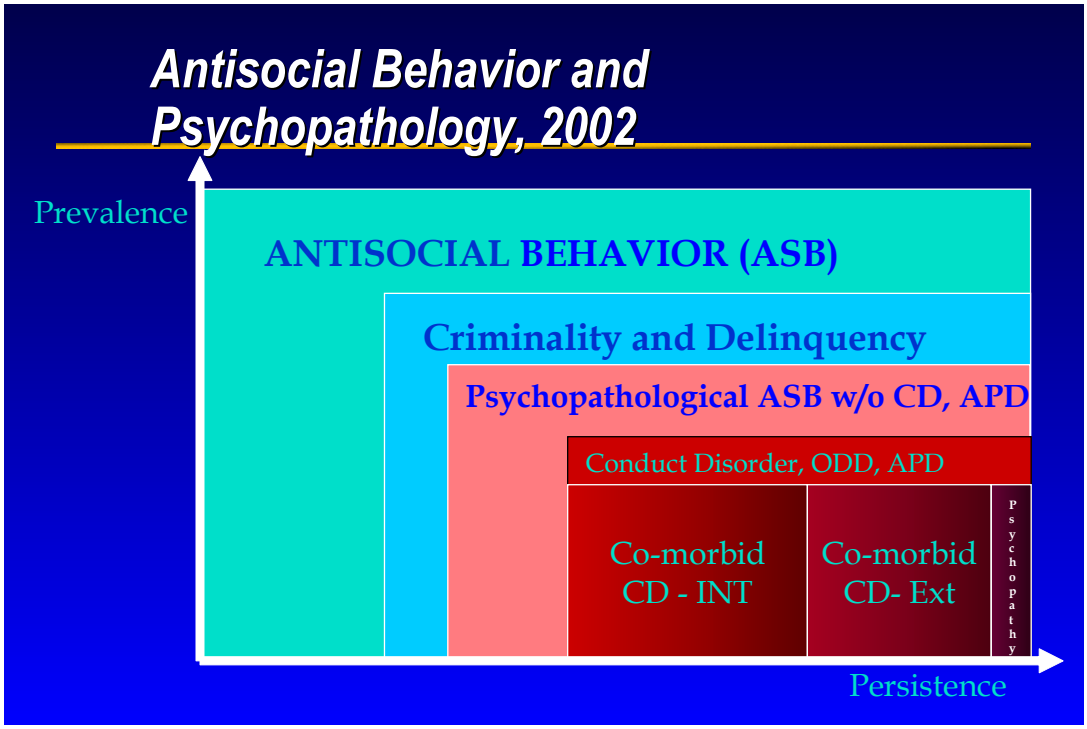
Executive Summary

This report is the written product of a 5-month evaluation of the California Youth Authority's mental health system. The evaluation was commissioned by the Youth Authority and was conducted by faculty and staff members of the Psychiatry Department of the Stanford University School of Medicine. In assessing the current mental health system, the evaluation team conducted site visits to all of the YA institutions, interviewed staff and wards, and utilized existing ward mental health data to form conclusions and recommendations. There were four main objectives, for each of which we provide findings, conclusions, and limitations. Before addressing the objectives, we briefly describe our findings of the search of the most up-to-date literature on juvenile delinquency and mental health.

Conclusions Based on the Analysis of the Literature up to 2001:

- Juvenile delinquency is likely to remain a serious problem in the United States for the foreseeable future.
- Our recent insights into the improved delineation of delinquency from psychopathologically driven antisocial behavior provides us with new opportunities to provide useful psychiatric assistance to the juvenile justice system (see Fig 1). Delinquency is often accompanied by high rates of coincidental and/or causal co-morbidities. Effective treatment programs for delinquency should use multi-modal approaches tailored to each youth's particular set of psychopathologies. We have suggested that the extensive co-morbidity observed in cases of delinquent children may provide a convenient sub-classification scheme, since many of the comorbid conditions have immediate management and treatment implications (Steiner, 1999).
- It is also quite likely that the sheer accumulation of comorbid diagnoses will have prognostic implications, as it becomes more and more difficult to address each illness in an appropriate manner. Highly compounded psychopathology seems likely to affect multiple domains of functioning and make treatment more difficult.

Fig 1.

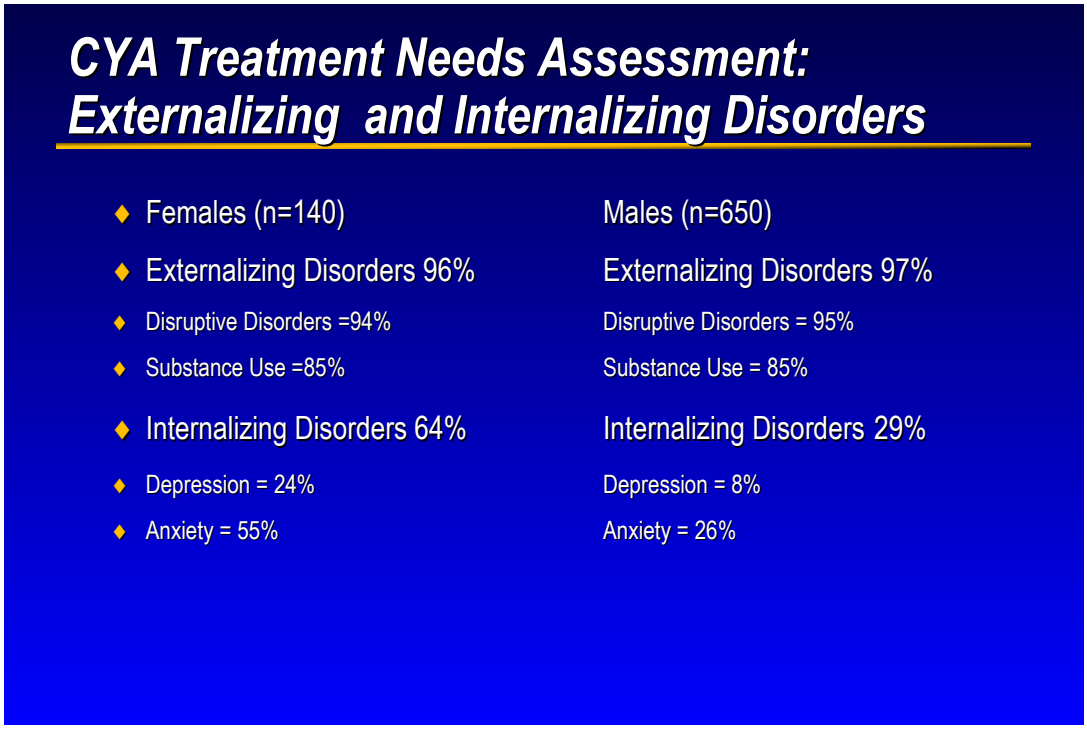


OBJECTIVE 1: To review the CYA Treatment Needs Assessment (TNA) to understand the prevalence of mental health, sex offender and drug and alcohol treatment needs within the current ward and parolee population.

Objective 1 Findings

$ Extremely high prevalence of psychiatric problems such as conduct disorder (93%), substance abuse and dependence (85%), and anxiety disorders (31%) (Fig. 2). In comparison to same-age juveniles from the general population and other juvenile incarceration and clinical settings, CYA wards often have much higher prevalence rates of mental health disturbances.

Fig 2.



- Few wards (3%) of the CYA are *without* one mental health problem or another (see Figs. 3-4).
- Extremely comorbid population. On average, 71% of males have 3-5 diagnosable disorders; 82% of females have 3-9 diagnosable disorders.
- Female wards generally have higher prevalence rates of disorders than male wards.

Fig 3.

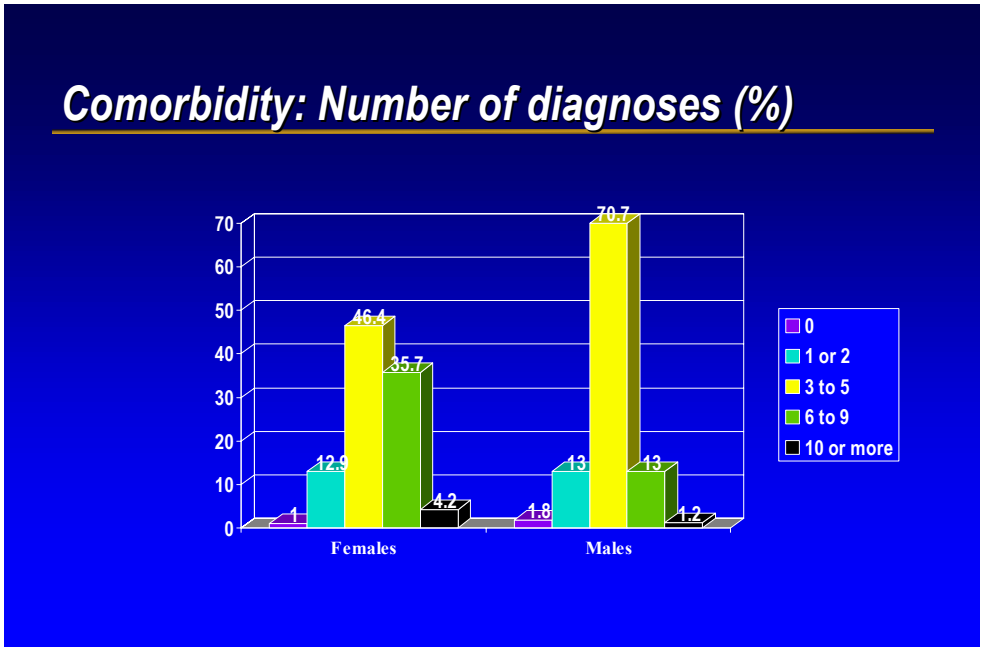
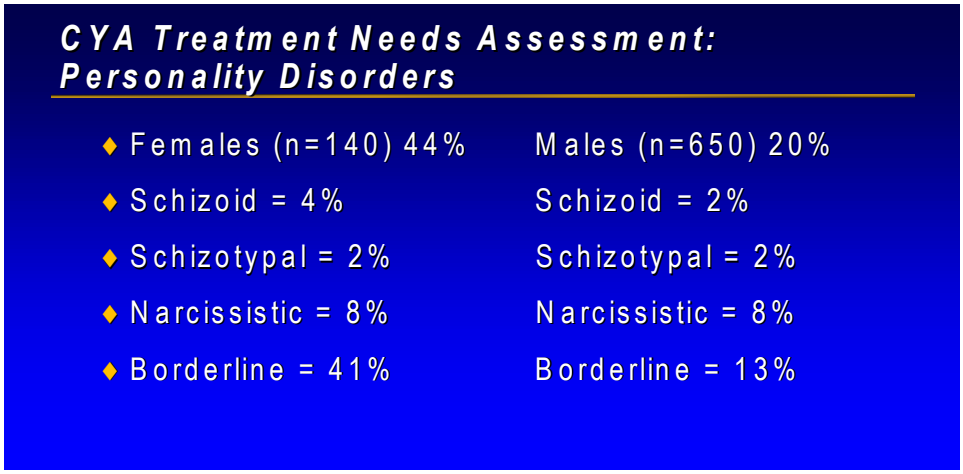


Fig 4



Objective 1 Conclusions

$ Findings were obtained with the largest sample in the literature to date, with a combined instrumentation that addresses a range of problems which never have been studied together in other samples. The instruments, their administration and the combination of variables we are able to describe inspire confidence that we are capturing as accurate a picture as these instruments are designed to deliver in the targeted areas.

- Results also confirm our suspicion that the psychopathology rates reflected in self-report screens are most likely an underestimate. In order to accurately screen this population and treat them appropriately, we will have to pay particular attention to the false negative rates (i.e., the abnormality is present, but the assessment instrument does not detect it) in our screening devices.
- Mental health problems (both internalizing and externalizing) can affect adjustment within the YA and/or rehabilitation efforts. Certain mental health and personality disorders may lead to fighting and other antisocial acts incompatible with institutionalized living. Indeed, personality traits, such as self-restraint, are predictive of recidivism rates 4 1/2 and 10 years after release from the CYA. Thus, it is imperative to begin to more fully address the some of the mental health disorders that are less severe in terms of needing immediate attention but can have a significant impact on daily functioning nonetheless. We believe this will decrease the number of disciplinary infractions within the CYA and increase the number of wards who desist their criminal behavior upon leaving the CYA.
- The comorbidities encountered in this population cluster in ways which might be helpful for designing treatment programs, and develop more targeted interventions. Although certainly the type of disorder is an important indicator for treatment and rehabilitation plans, the sheer number of diagnoses is also important for prognosis and success after release. Therefore, in addition to examining the types of mental health problems wards have, the number and co-occurrence of disorders should be examined as well.

Objective 1 Limitations

- All possible diagnoses were not assessed. However, the protocol in its current length already taxed this disturbed and difficult population.
- Limited information on medical pediatric and neurological disease. Obtaining this information would involve more extensive and invasive tests, as well as being expensive and difficult data to collect. Future studies with smaller samples of YA wards should attempt to obtain this information, however, as it may prove fruitful in getting a total and complete picture of wards.
- Certain diagnoses are so ubiquitous as to be not particularly helpful in this population. For example, because so many of the wards meet the criteria for conduct and antisocial personality disorders, labeling them as such will not contribute to predicting future success or failure.

OBJECTIVE 2: To review the current screening procedure and suggest possible improvements leading to improved identification and service delivery

Objective 2 Findings

- Five a-priori clusters of diagnoses were formed and confirmed through statistical analysis. Clusters were created to reduce the number of diagnoses and were devised according to similar disturbances and similar treatment plans (Fig. 5).
    1. Cluster I: Mood, anxiety, borderline personality and oppositional defiant disorders. 50%
    2. Cluster II: Psychosis, attention deficit-hyperactivity, schizoid, and schizotypal disorders, 15%
    3. Cluster III: Eating, somatoform, and adjustment disorders, 5%
    4. Cluster IV: Alcohol and substance abuse (who do not fall into Clusters I-III) 20%
    5. Cluster V: Alcohol and substance dependence (who do not fall into Clusters I-III) 27%

Fig 5a

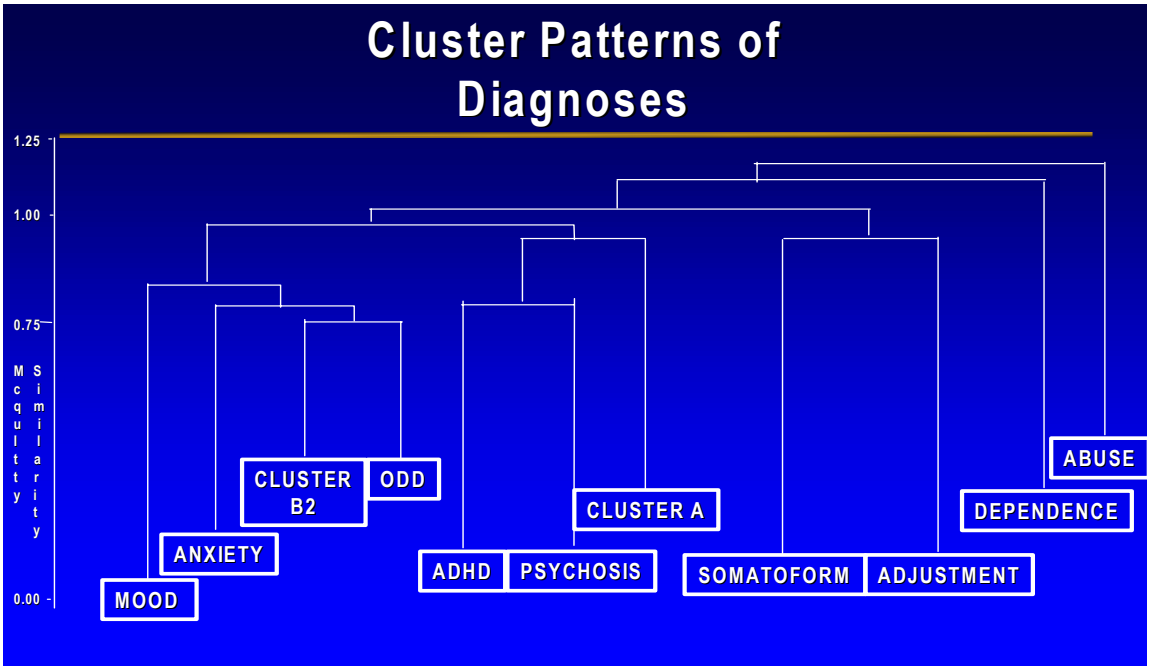
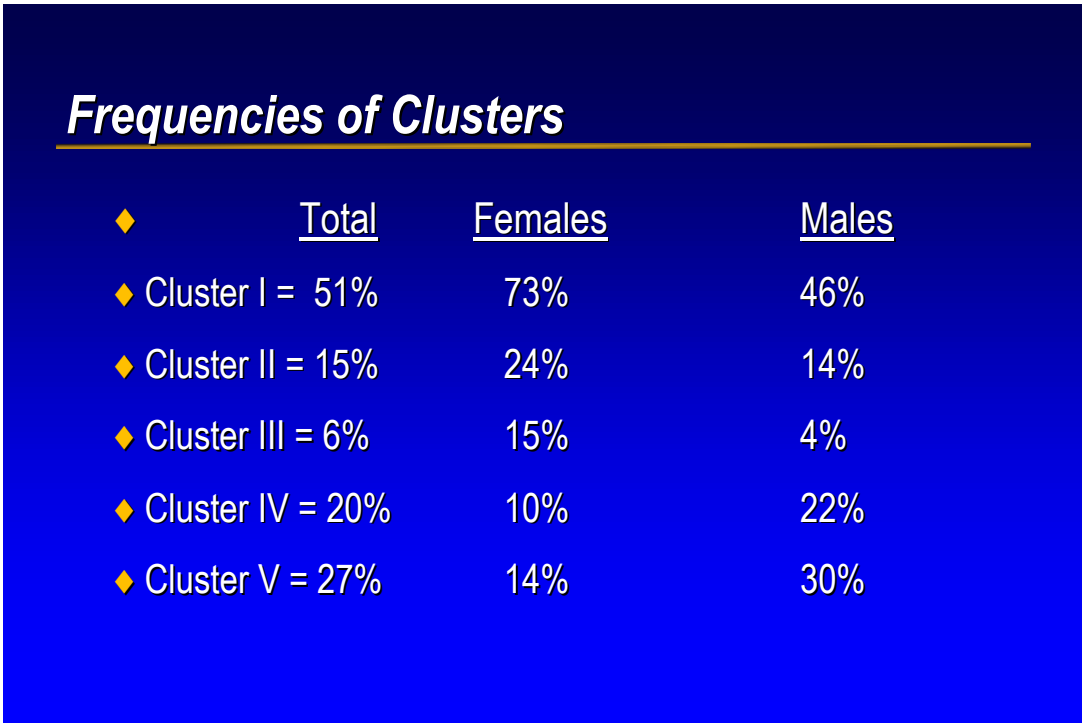


Fig 5b.

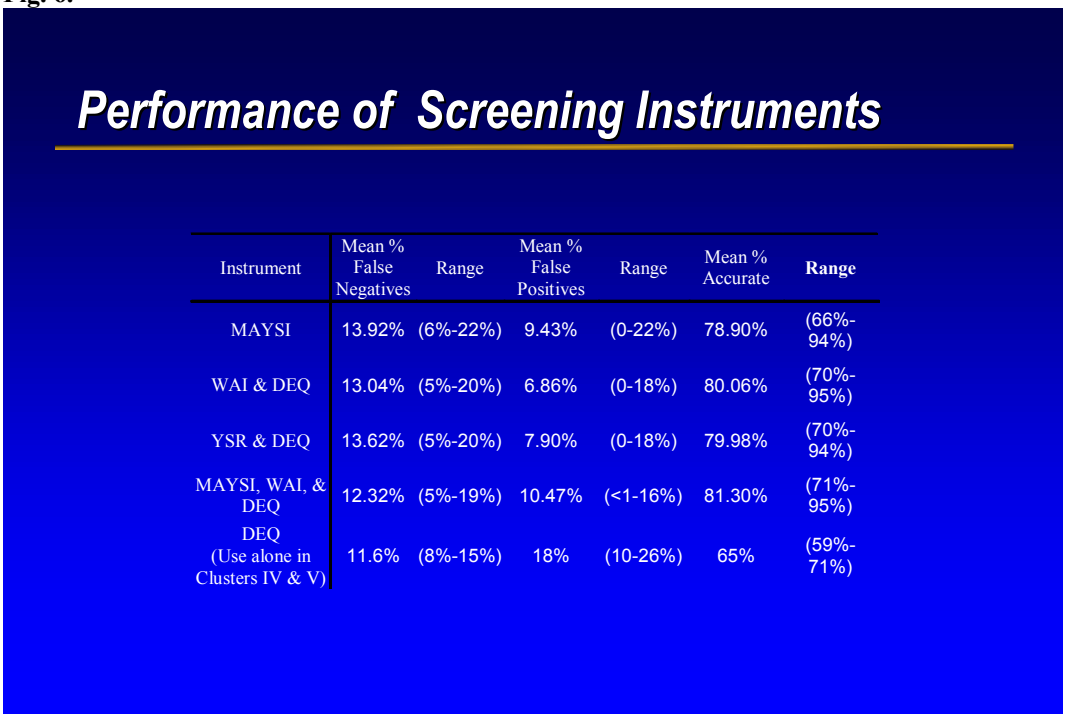


$ When cost is considered, logistic regression reveals that the MAYSI, the WAI, and the DEQ have the most predictive validity (Fig. 6). Although all of the instruments performed well, consideration of cost must be taken into account, which includes monetary costs as well as costs in time of administering the measures and compensating staff. For cost reasons, we recommend using the MAYSI, the WAI, and the DEQ, and to

cease using the YSR. The YSR is the only measure that requires spending money for its use. Also, the YSR was developed for non-delinquent youths, thus biasing the actual picture of mental health problems present in YA wards. Additionally, the MAYSI, the WAI, and the DEQ are a suitable combination. The MAYSI measures problems being currently experienced, the WAI measures personality traits more consistent over time, and the DEQ provides an accurate assessment of substance use problems.

$ While all the screening instruments show significant statistical associations with diagnostic clusters, we still would need to test them further by signal detection analyses to develop specific cut points for clinical use and algorithms for clinicians and staff to follow. This we would do as follow-up analyses once we have finalized the screening package. We would suggest that these cut-points be developed conjointly with a group of clinicians from within the CYA to ensure optimal fit and performance. These follow-up analyses also would result in the development of a standardized clinical evaluation procedure which then could be used across camps and institutions, integrate the screening data into a particular ward's treatment plan, and begin the continuum of care which forms the backbone of our recommendations (see below, B.4).

Fig. 6.



Objective 2 Conclusions

$ The most cost effective package seems to be the MAYSI, the WAI, and the DEQ (total number of questions: 146; Cost: None). These three cover syndromal and trait evaluations, as well as substance use and abuse, which all should be tested in the future for their relative and conjoint contributions to predictive validity in this population.

Objective 2 Limitations

$ No information was collected on cognitive functions, neurological, or medical pediatric impairment. This information will need to be added in a systematized and standardized manner to the existing screen.

OBJECTIVE 3: To review existing services in the CYA and suggest improvements based on best practices nationwide

Objective 3 Findings

Relationship of specialized programs to general population beds:

- The current distribution of beds and their relative proportions seem reasonable. On the basis of the presence of ANY of three criteria: co-morbidity greater than one standard deviation in the TNA sample, active suicidality and active psychosis. We then extrapolated these percentages to the total population, an estimated number of beds falls between 619 beds and 1513 beds. These numbers most likely would reflect all special beds needed (Including ITP, SCP and the new SBTP units).

Assignment to special programs.

- Though useful for planning treatment and measuring its effectiveness, the GAF should not be the only determinant of assignment to a special program or in elevating one's level of care. The type of diagnosis, comorbidity, developmental (and probable causal) sequence of events and available treatments should all be considered.

- Additionally, there is another complication of assigning special treatments to wards in the juvenile justice system. Many of the assignments are made by fiat rather than by medical planning, and the recommendations come from entities not responsive to clinical input, education or feedback.

- Another issue regarding the designation and use of intensive treatment beds arises from the influence the legal status of these children has on their prescribed treatments. The current structure evolved in response to legal demands (all sex offenders and some drug-related offenders need to complete a special program). We strongly advocate the separation of criminological management and rehabilitation resulting from legal infractions, from medical treatment that is driven by medical necessity. While these two interventions may complement each other, they should not be applied indiscriminately or taken as interchangeable.

- The criminological nomenclature also speaks of treatment while not necessarily referring to interventions such as therapy or medication, which can be quite confusing. We strongly advocate a separation of these functions.

The state of mental health care in the CYA

$ The staffing patterns in the CYA varied extensively by program and institution. However, all institutions share the common threat of being currently understaffed in mental health care services.
    1. There is a significant resource shortage.
    2. The organizational culture of most CYA facilities is not conducive to mental health treatment.
    3. Continuity of care is lacking.
    4. Specialization of treatment and rational treatment assignment are uncommon.

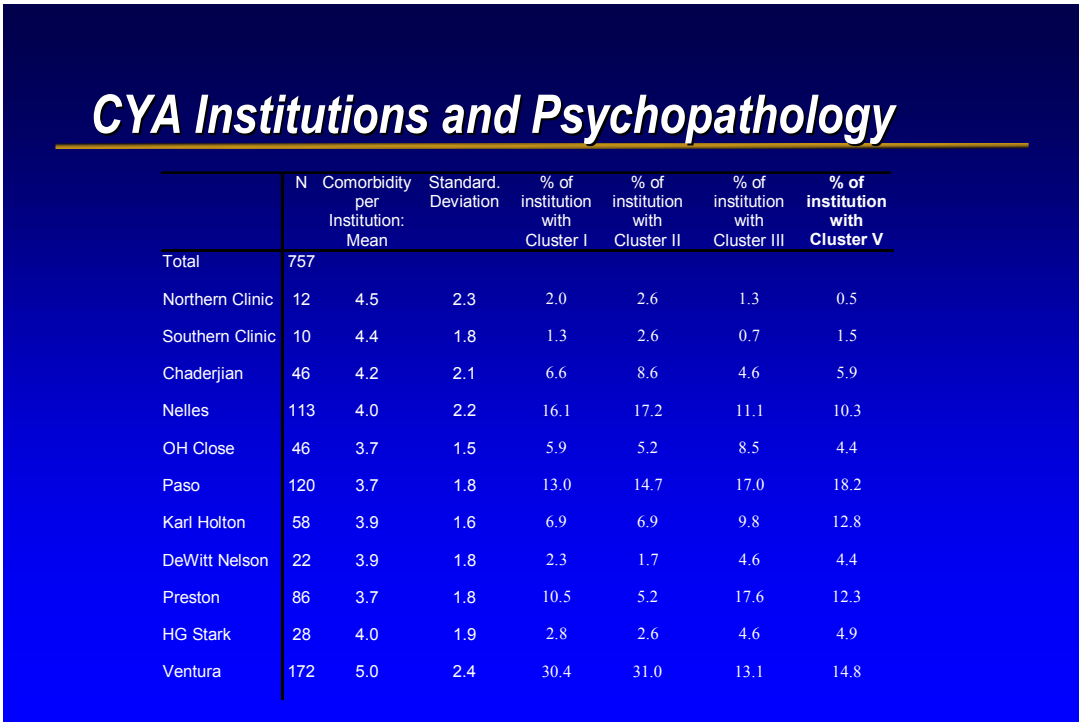
$ External forces drive staff to use time ineffectively. A sad irony of the CYA system is that as limited as

staff time is, much of it is spent in unproductive activity. The amount of paperwork, especially board reports, is inordinate. It is not clear that all of this paperwork serves much clinical purpose, for example having a significant influence on parole board decisions. An additional problem is that clinical staff are subject to enthusiasms of administrators and board members who have no training in mental health sciences. Whether any one of these or the other services proposed by some non-professionals are effective in some cases is not known. The process through which mental health programs in the system take on new tasks assigned by those without mental health background and is not supported by empirical evidence. This problem relates to the conflict or cultures problem mentioned above, in that mental health within the system is not strong enough to assert a different approach to deciding which treatments to use.

CYA campuses and psychopathology

$ All institutions have a substantial number of comorbid wards and all clusters are present in nearly every institution. The Ventura female population was highly psychiatrically morbid across all clusters (Fig. 7).

Fig 7.



	N	Comorbidity per Institution: Mean	Standard. Deviation	% of institution with Cluster I	% of institution with Cluster II	% of institution with Cluster III	% of institution with Cluster V
Total	757						
Northern Clinic	12	4.5	2.3	2.0	2.6	1.3	0.5
Southern Clinic	10	4.4	1.8	1.3	2.6	0.7	1.5
Chaderjian	46	4.2	2.1	6.6	8.6	4.6	5.9
Nelles	113	4.0	2.2	16.1	17.2	11.1	10.3
OH Close	46	3.7	1.5	5.9	5.2	8.5	4.4
Paso	120	3.7	1.8	13.0	14.7	17.0	18.2
Karl Holton	58	3.9	1.6	6.9	6.9	9.8	12.8
DeWitt Nelson	22	3.9	1.8	2.3	1.7	4.6	4.4
Preston	86	3.7	1.8	10.5	5.2	17.6	12.3
HG Stark	28	4.0	1.9	2.8	2.6	4.6	4.9
Ventura	172	5.0	2.4	30.4	31.0	13.1	14.8

Medication prescription and diagnostic clusters

$ Because of the rarity of the presence of psychiatrists in the system trained in child psychiatry and psychopharmacology, modern psychopharmacology was not generally practiced.

$ Across all clusters, we find that antidepressants are used most frequently prescribed, regardless of diagnosis, followed by antipsychotics and mood stabilizers. Stimulants, anti-manic and antianxiety agents are a distant 4th , 5th and 6th. Encouragingly, sedatives are rarely prescribed. Also notable is the fact that SUDs receive low levels of prescription, however they still receive some without the presence of another diagnosis even. Most concerning is that there is a substantial percentage (22%) of Cluster III wards

receiving potent antipsychotics with unclear indication at the present time.

Survey of ward satisfaction with mental health services

- Majority of wards (92%) were aware that mental health services were available to them.
- One-third of wards indicated that they would first seek help from their YCC or caseload counselor if they had a problem; only 7% would seek out a psychologist or psychiatrist.
- Forty-six percent of wards were satisfied with the mental health help they received compared to 7% who were not satisfied.

Matching satisfaction with psychiatric morbidity

- The presence and level of satisfaction with help was seemingly not influenced by the presence and frequency of mental health problems.
- Approximately 80% and 77% of wards who fall into one or more of the clusters have never been in an intensive treatment program or specialized counseling program, respectively.

Objective 3 Conclusions

The relationship between mental health treatment and active psychiatric diagnosis is much less firm than it should be, given recent advances in our understanding of the best practices available for the treatment of these children. This is particularly evident in the use of medications for the treatment of disorder. But it is also evident in the institutional assignment of individuals in the system. We think the origin of this misalignment is complex

a. Nomenclature blurs lines between criminological and medical/psychological interventions and creates the impression that they are interchangeable. At the same time, the system has clearly switched into a safety first mode which is applied indiscriminately across all individuals and all locations. Such an emphasis is not always justified, and there will be some cases where mental health treatment needs will dictate management within the institutions.
b. The existing mental health system is fragmented, not unified. It does not offer career trajectories to its practitioners. It deselects competent and energetic individuals by nature of the marginal compensation and isolation in the system.
c. Lack of resources creates holes in service structure problems.
d. Isolation of mental health practitioners in the system from the management teams (school, criminological) deprives them of invaluable input to be received and output to give back to the team.
e. Education and training of mental health practitioners in the system is limited and thus, in combination with isolation leads to idiosyncratic and outdated practices.
f. YOPB demands on the system are random and create pressures and demands that interfere with appropriate care.

Screening information, clinical diagnosis, treatment plan, assignment to special programs and continuity of care in the broadest sense are extremely uneven between institutions, despite the fact that most institutions serve very similar individuals.

While bed supply and presence of putative special and intensive programs might be sufficient to meet existing needs, staffing of these facilities and the expertise of individuals running these programs is of uneven quality, requiring more rigorous education and supervisory efforts. We expect a resolution to come from a re-composition of the mental health team components, a more central assignment of their roles in the criminological management and psychiatric treatment process, and a sophisticated coordination of the multilevel interventions need.

The problematic allocation of resources derives largely from the lack of a modern vision on how to integrate mental

health in the care of delinquent children.

Objective 3 Limitations

$ Studies of sites were not random. All 11 institutions were visited. Moreover, specific personnel within each program were contacted. It was not possible to speak to every staff member at every institution.
$ Site visits were time limited, and thus detailed information could only be garnered from a limited number of personnel from each program. Also due to time constraints, medical records were not directly examined.
$ Satisfaction was drawn from only a small percentage of wards and was measured only one time with one brief, self-report questionnaire.

OBJECTIVE 4: To submit a detailed plan identifying existing deficiencies and make suggestions for improvements

Objective 4 Findings

General comments and principles informing the recommendations
Despite the fact that our knowledge base is by no means complete, we are able to distill several salient treatment principles that have promise for success (Steiner & AACAP, 1997). The nature and degree of psychopathology which associates with delinquency calls for several program characteristics which need to be implemented to increase our chances of success.

a. Aiming for continua of care. We expect that ultimately, a continuum of care model will provide the best vehicle for delivering state of the art interventions. While morbidity is high, we expect that extensive rather than intensive intervention will be the basic model to address most of these problems. Finally, we expect that most children will require multi-modal, carefully coordinated intervention, targeting multiple deficient domains. The main principle governing treatment will be that the ward be allowed to function in the least possible restrictive environment which is capable of ensuring safety and personal growth.

b. Because juvenile delinquents are a highly heterogeneous group, with differing needs and levels of accompanying psychopathology, it is unrealistic to expect that any one intervention or even any one program will be equally effective for all members of such a diverse population.
c. There is little room for complacency or therapeutic nihilism. The general message of recent investigations of program efficacy has been most succinctly stated by Loeber and Farrington in a recent summary of the accumulated wisdom of an expert panel on the issue: It is never too early and it is never too late (Loeber & Farrington, in press).
d. Multiple treatment targets should be selected, as most of these youths are deficient in many domains of functioning.
e. Most experts agree that there is little chance that isolated single interventions will be effective against all forms of delinquency. Interventions need to be multi-modal, they need to be applied over sufficient lengths of time (i.e., over the course of months, not weeks). As much as is possible, they need to be delivered in settings which retain the child in their social context to which they will return.
f. Simple inoculation approaches and interventions based on single-event hypotheses are not going to be successful.
g. Services within the CYA need to reflect these principles. Services should effectively combine criminological management, and psychosocial and psychopharmcological interventions.

Specific recommendations regarding staffing and bed requirements.

As a general principle, we suggest that the YA would be best advised to treat the most prevalent problems which

have evidence-based, tested treatments available, and which have a very high chance of producing positive outcomes in terms of mental health as well as criminal recidivism. Diagnoses in Clusters I, II and V would fulfill these criteria. There are special safety concerns which make Cluster II diagnoses somewhat more difficult to tackle. Programs and staffing should reflect the needs of wards with these diagnoses. We recognize that many difficult problems occur in this population, but some of them are infrequent, even rare, albeit extremely troublesome. Such problems should be probably handled by contracted arrangements.

We think that such contracted arrangements can and should be made with other state entities, such as the Department of Mental Health. To saddle the juvenile correctional system with the care of the indigent underidentified, underserved, and undertreated mentally ill is tantamount to the criminalization of the mentally ill and not advised.

Based on certain assumptions (see full narrative), we estimate the following distributions: 837 ITP cases, 1082 SCP cases and 4663 GPOP cases per year. We then further calculated the actual beds needed per year in the CYA system, taking into account the Average Length Of Stay in each one of the service components, resulting in the final estimates of beds in the CYA: 209 ITP beds, 1709 SCP beds, and 4663 GPOP beds.

Thus, we conclude, that the current structure of beds in the CYA system reasonably reflects what we expect the configuration to look like, provided that modern medical case management is brought to bear on the situation, especially providing intensive and restrictive services only when needed, and for the most efficacious use of time.

Recommendations regarding needed staff on the basis of projected bed needs

Based on cases per FTE professional time and assuming 1800 minutes direct patient contact per week per FTE (actual minutes may vary depending on frequency of group sessions of 8 patients per group), it is anticipated that an additional 33 FTE psychiatrists, 64 FTE psychologists, and 89 FTE Masters levels persons will be needed. (Note that there is uncertainty regarding the addition of masters level individuals. We are told that they do exist in the system, but currently do not fulfill the functions expected of them. Thus, the number of additions may be considerably lower than shown.)

Fig 8.

Professional Staffing needed for beds as suggested by CYA population characteristics

Based on cases per FTE professional time
Assuming 1800 minutes direct patient contact per work week per FTE
Actual minutes may vary depending on frequency of group sessions 8 patients per group

Type of bed	Psychiatrist	Total FTE	PhD	Total FTE	MA *	Total FTE	Total MH min's per ward per week
ITP	30	7	30	7	15	14	
(minutes per ward/week)	60		60		120		240
SCP	100	17	50	34	60	28	
(minutes per ward/week)	18		36		30		84
GPOP	500	9	200	23	100	47	
(minutes per ward/week)	3.6		9		18		30.6
Total Suggested Clinical FTE		33		64		89	

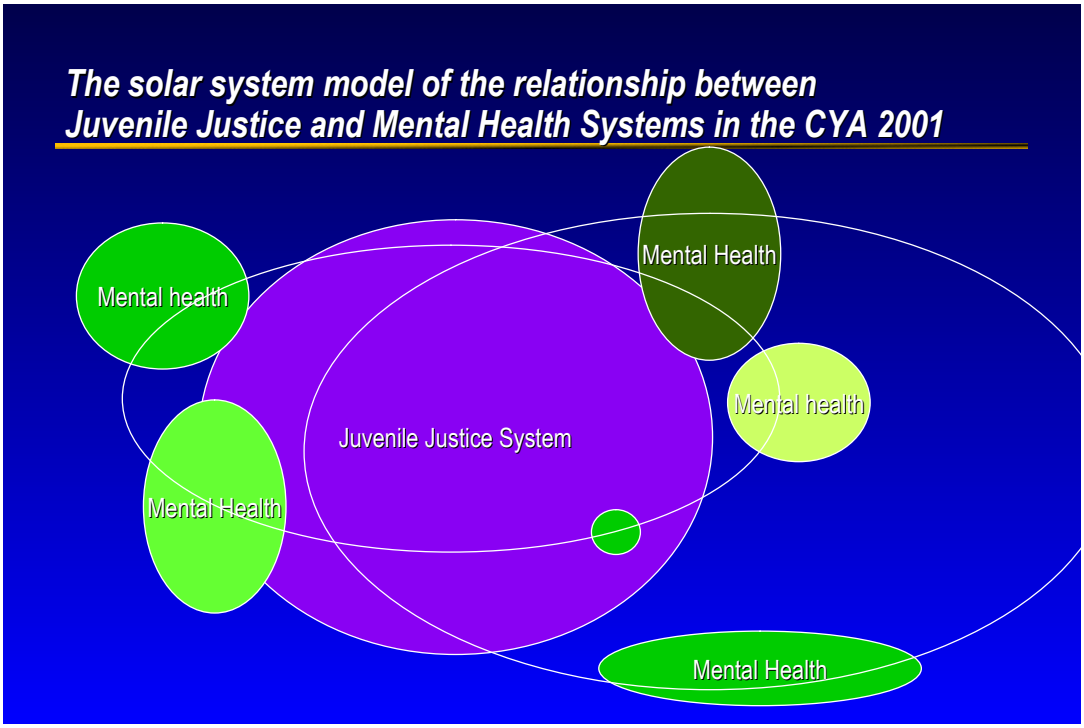
Our new model of treatment care supplies considerably more resources to lower level of care than are currently available. It is this re-allocation that will make this continuum of care model work. Comparing these recommendations with what is currently available in the CYA, we see that these needs are incremental to existing positions, but not exorbitantly so, supporting our original contention that maximization of existing resources is a necessary first step in achieving improvement in the system.

Objective 4 Conclusions

A change in vision: Creating a Coordinated Continuum of Criminological and Mental Health Interventions (CCCMHI)

- Currently, the mental health services across the CYA are at best characterized as adjunctive to juvenile justice and criminological rehabilitation and management, and at worst, isolated and even irrelevant. The model is much like a solar system where a star (Juvenile Justice) is encircled by a very diverse array of planets (see Figure 9 below).

Fig 9.



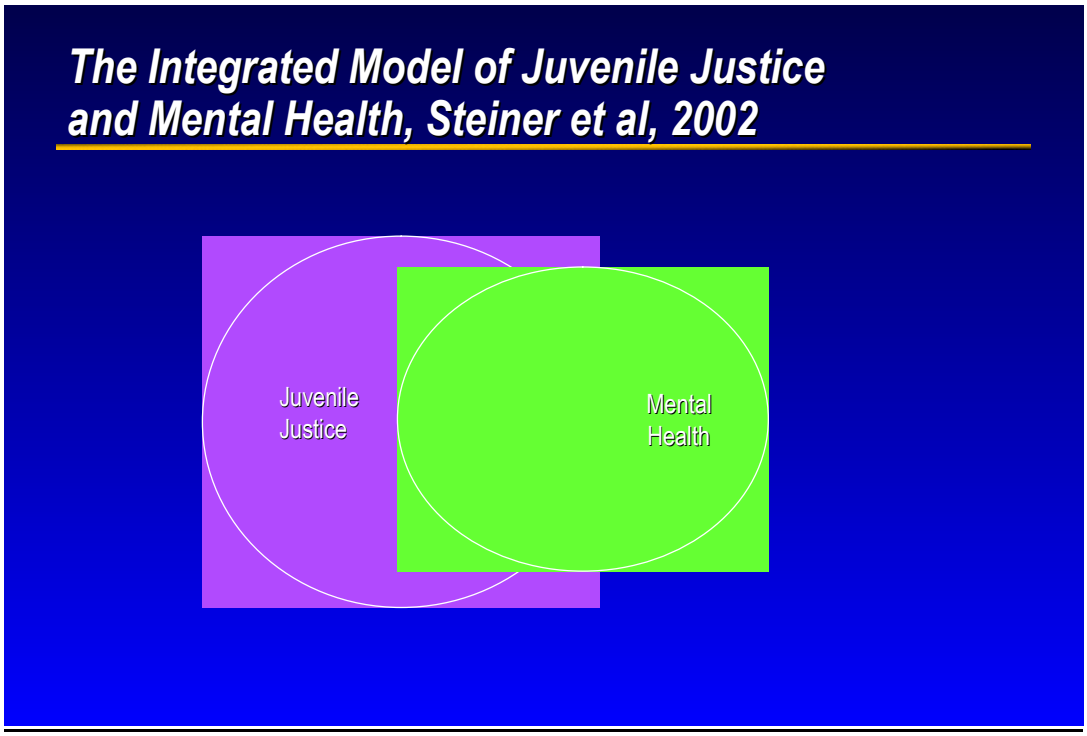
• We suggest that on the basis of our findings, we need to change this basic alignment to reflect more accurately the existing medical needs in this population. Mental health services need to be an integral part of the ongoing criminological management of these wards. Depending on the severity and pervasiveness of disorders, mental health needs to play an increasingly prominent role with certain wards to the point of becoming the controlling influence in the management if severity or extensiveness of disorder warrants this.

To this end, we propose the following:

a. that general population management be considered equivalent to intensive outpatient care,
b. SCP programs be considered day treatment
c. ITPs be considered intensive residential facilities.
d. SBTP be considered equivalent to locked inpatient units
e. Staffing should be uniform across campuses and institutions for these settings, informed by best practices.
f. These treatment settings should be distributed across the state such that they deliver comparable services to youths in the northern and southern part of the state, thus enabling youths to be treated in as close proximity to their social environments as possible. Such proximity would facilitate the establishment of continua of care and preparatory programs and family contacts for exit.
g. At the same time, we advocate for a certain degree of specialization in different institutions along the lines suggested by our diagnostic clusters to facilitate more expert delivery of targeted services, staff development and ward recovery.
h. We also suggest that settings be created which are prepared to handle those wards who are not psychiatrically impaired yet present severe management problems. These settings should be separate from the treatment settings we have described and be primarily criminologically informed by their management approach. Mental health services should only be provided on a consultation basis in these special settings.

- The implementation of these recommendations would lead to an integrated model along the lines below.

Fig 10.



- Juvenile Justice and Mental Health overlap to a considerable, although not complete degree. Juvenile Justice and its interventions very much form the basis and backbone of the needed interventions for these youths. The system provides the necessary limits and boundaries of personal freedom, while appealing to personal responsibility. Mental Health provides the necessary procedures to restore youths to a level of functioning where they will maximally benefit from juvenile justice interventions. At all times there is a mutual commitment to examine conjointly the most prudent and efficacious pathway to intervene in a given case. Periodically, such a plan for intervention is examined and updated in the light of new information regarding the progress of the youth.

A realistic timeline for implementation

Phase 1 (January-June 2002) Maximizing existing resources

- Aggressive recruitment of mental health personnel, improved retention, reassignment and re-educaction of current practitioners should all be immediate goals for the system.

- The easiest way to improve the quality of care in the system at no additional resource cost is to stop making clinical staff spend their time on unproductive activities. A second productive goal would be for non-mental health professionals in the YOPB to stop imposing untested treatment enthusiasms on the system.

- Another laudable immediate goal is for the CYA and CDC to stop competing against each other for psychiatrists and psychologists. Pay should be comparable across systems.

Phase 2 (January 2002-June 2003) Creating centers of excellence and foci for intervention

- The CYA should partner with academic facilities expert in dealing with this population, to bring in more resources and information. More generally, it should invest more in staff training, to help staff become more in touch with the broader community that is implementing evidence-based mental health programs.

- Because of the culture clash problems mentioned above, we believe the CYA should create more specialized facilities rather than make minor mental health investments in primarily correctional environments. We suggest focus on two problems, Cluster V (alcohol and substance dependence) and Cluster I (Mood/ and anxiety and related problems).

- More specifically, we suggest another facility akin to Holton, but based in the Southern part of the state. In the full narrative, a possible model for a modern approach to adolescent substance abuse is put forth.

Phase 3 (January 2002 – July 2003) Thinking about the future

- There should be an on going dialogue regarding the optimal configuration of the juvenile justice services in California between all members of the team, and the team and national and international experts with the goal to critically examine the efficacy of programs proposed, new programs and treatments available, implications of findings from the borderline between criminological and psychiatric approaches.

- We anticipate this dialogue to be vibrant and stimulating for both sides, and to lead us to new ways to conceptualize delinquency, its treatment and prevention. The results of such a dialogue most likely cannot be fully anticipated right now, but more likely than not will lead us to do better justice to help the less fortunate children of our society become once again part of our future.

Objective 4 Limitations

While this report is data- and practice-based and comprehensive, it is not exhaustive. There are many unknowns that remain which might influence recommendations and their outcomes. We are particularly mindful that often, shifts in emphasis in systems of care, such as the CYA, produce many unanticipated outcomes. A prime example of this would be the impact of the creation of a peer culture that exerts a positive mental health instead of a negative gang influence. But we are encouraged by the sheer fact that such a detailed report has been requested and obviously will be taken into consideration. We think that this could be the beginning of an exciting process which would result in the improvement of the lives of victims, perpetrators and their families: for all too often, these three happen to be very closely linked.

A. Introduction and Background

> It is crucial that we deal not only with the specific behavior or circumstances bring them [youth] to our attention, but also with their underlying, often long-term mental health and substance abuse problems.
>
> Bilchik (1998)
> Office of Juvenile Justice and Delinquency Prevention

We have four main objectives in this current report: 1) To report the results of the CYA Treatment Needs Assessment (TNA) regarding the prevalence of mental health, sex offender and drug and alcohol treatment needs within the current ward and parolee population. 2) To review the current screening procedure and suggest possible improvements leading to improved identification and service delivery 3) To review existing services in the CYA and suggest improvements based on best practices nationwide. 4) To submit a detailed plan identifying existing deficiencies and make suggestions for improvements and prepare a detailed report of findings and recommendations. These objectives directly parallel the desired scope of service as put forth by the CYA.

The problem as seen in the literature to date:

In the 1980s and 1990s, our nation experienced an increase in serious, violent juvenile crime. Although rates have since dropped off, our need to understand and prevent future occurrences of juvenile crime has remained steadfast and of the utmost importance. As the above quote indicates, the federal government as well as state and local governments and the scientific community, recognize that one of the most promising approaches to the comprehension and prevention of youth crime is the mental health model. Indeed, "the mental health needs of youth in the juvenile justice system have received more attention at the Federal level in the past two years than in the past three decades combined" (Cocozza & Skowyra, 2000, p. 3). As such, the CYA's Mental Health Assessment Request is timely and the CYA remains at the forefront of progress in the juvenile justice system.

Despite recent advances in reducing crime and especially juvenile crime (OJJDP, 1999), juvenile delinquency is still a significant problem in the United States. Whether data are obtained from youth self report or from official crime statistics, the same pattern emerges: there is a sharp rise of antisocial activity between early puberty and late adolescents for both genders (Snyder, 1994). Some studies (Caspi, Elder, & Herbener, 1990; Moffitt & Silva, 1988) report that up to 80% of juveniles are involved in delinquent acts. While the majority of cases involve property related offenses, it is also true that juveniles are involved in the perpetration of crimes against persons. Most of all of these crimes appear to be perpetrated by a relatively small number of juveniles: approximately two-thirds of all violent crimes are committed by juveniles with four or more arrests (Snyder, 1994). On the other hand, it is also true that while antisocial behavior and delinquency are extremely common in the adolescent age range (Steiner & Feldman, 1999), the predictive validity of such labels is not very strong for life time persistent problems: in fact, the majority of delinquents will exit from a lifetime career of crime (Rutter, Giller, & Hagell, 1999).

The challenge is to introduce new models of taxonomy and observation to more reliably identify those who are at high risk for re-offending (Steiner & AACAP, 1997; Steiner, 1999). One such model may be based on the study of the prevalence of psychopathology in delinquent youths. Such a model is distinct from delinquency (a criminological construct) in that the youth's diagnosis does not depend on their legal status (Steiner & Cauffman, 1998); it is distinct from the study of traits, such as impulsivity and temperament, in that it seeks to establish qualitative taxa which relate to specific and cost-efficient treatments (such as depression, mania and PTSD).

Any clinician working with delinquent or conduct-disordered juveniles needs to differentiate between antisocial acts, delinquency, criminality, conduct disorder, antisocial personality disorder and psychopathy (Steiner, Williams,

Benton-Hardy, Kohler, & Duxbury, 1997; Steiner and AACAP, 1997; Steiner & Feldman, 1999). We have discussed these distinctions repeatedly and refer the reader to these publications for a fuller discussion (Steiner, 1999; Steiner & Cauffman 1998; Steiner & Wilson, 1999). Suffice it to say, that we believe that only a portion of delinquents will exhibit an association between their antisocial acts and psychopathology. Certain forms of psychopathology (such as conduct disorder and ADHD) will be over-represented. It is the task of the clinician to help subcategorize the extremely heterogeneous population of delinquents and see to it that those with diagnosable disorders are appropriately treated.

It has become clear that delinquency describes a large and heterogeneous population (Sholevar, 1995; Steiner and AACAP, 1997). Mapping psychopathology onto these samples may help define the subcategories and help them to receive appropriate intervention. The utility of the diagnosis of conduct disorder, by itself appears to be a highly comorbid condition which only sometimes appears in isolation (Steiner, 1999; Steiner and AACAP, 1997). In other words, in the adolescent age range, where antisocial and even delinquent behavior is extremely common, most other psychopathological conditions seem to associate with such behaviors. It is an open question as to whether comorbid conduct problems, especially those antedated by the onset of other psychiatric disorders, such as depression, show a differential outcome from singly diagnosed conduct disorders. Or, from a criminological viewpoint, it remains to be seen as to whether a diagnosis such as conduct disorder offers any additional explanatory force beyond the mere criminological characterization of an individual. Is it true that to label someone as having conduct disorder will help to better explain his/her current or future status rather than the label "delinquent" (i.e., somebody whose antisocial acts have lead to legal conviction and punishment)? One of the main advantages of this label is the independence of legal status. It thus calls attention to a problem before it exists, i.e., in a legal sense -- rendering it amenable to prevention and intervention. By looking at conduct disorder from the viewpoint of a clustered disturbance of the aggression system, we might add to the understanding of why certain youths persist in criminality, even after given chance after chance to break from a lifetime pattern of crime, while others desist from such activities easily and quickly even with the most minor intervention. We assessed the differential importance of psychopathological conditions in this cohort, especially in response to well-designed and -delivered multi-modal interventions. Such studies are currently not available, as we have just begun mapping prevalence rates and understanding the importance of psychopathology in the context of delinquency.

Surprisingly, it is only in the recent past that researchers have investigated the mental health of youthful offenders. The research conducted so far has indicated that the frequency of mental health disorders is significantly higher for delinquents than for comparable non-delinquent adolescents. For example, Cocozza (1992) estimated that every year, 150,000 juveniles who come into contact with the juvenile justice system meet the diagnostic criteria for at least one mental disorder. Moreover, certain disorders are extremely common, such as alcohol and substance abuse/dependence; estimates have ranged from 30 to 80% in juvenile delinquents (Steiner & Cauffman, 1998). Another disproportionately high diagnosis among juvenile offenders is post-traumatic stress disorder (PTSD). Steiner and his colleagues (see Cauffman, Feldman, Waterman, & Steiner, 1998; Steiner, Garcia, & Matthews, 1997) discovered that in a population of juveniles incarcerated in secure facilities, approximately 50% of the females and 30% of the males fulfilled criteria for current (PTSD). Similarly, Carrion and Steiner (2000) found that in their sample of juvenile delinquents, 28% met criteria for a dissociative disorder and nearly all (97%) self-reported a history of traumatic events. Other conditions, such as affective disorders, psychotic disorders, learning disorders, attention disorders and anxiety disorders have been found with increased frequencies in other states as well (Atkins et al., 1999; Pumariega et al., 1999), at levels comparable to or exceeding those found in youths from community mental health centers and inpatient units. Clearly, this population is psychiatrically highly compromised, justifying clinical involvement and attention.

Although scientists and clinicians are beginning to generate accurate and complete mental health portraits of juvenile offenders, methodological problems and inconsistencies across studies limit the conclusions that can be drawn. To date, approximately 16 studies have been published investigating the psychiatric concerns of juvenile delinquents. Within these studies, males outnumber females, and the number of participants has ranged from 31 to 649. Across these studies, results have varied, primarily due to the fact that distinct (and often incomparable) methodologies were utilized. For example, some of the studies combined findings from boys and girls, which we

know from our own research, is inappropriate and ultimately futile because of the different pathways leading to delinquency and subsequent trajectories for the two genders. Other methodological differences include differences in selection processes, instrumentation choices (e.g., clinical examinations vs. self-report vs. structured interviews), range of pathologies studied, criteria for inclusion and diagnoses, and data collection time points. When combined, these methodological inconsistencies restrict definitive conclusions and credible portrayals. Lastly, previous studies have, on average, found high rates of morbidity (around 60%) and high rates of comorbidity (around 66%), but the ranges of morbidities has been extreme. For example, Friedman and Kutash (1986) uncovered a 10% rate of conduct disorder compared to a 100% rate uncovered by Timmons et al. (1997). Perhaps because of these methodological problems, recently researchers have set out to conduct larger and more efficient studies of the mental health needs of juvenile offenders. To date, there are two such studies: one conducted by Dr. Linda Teplin in the Chicago area, focusing on juvenile jail detainees, and the other conducted by the P.I. of the current report and the CYA. Thus, we are in an excellent position to provide a definitive contribution to the literature on delinquency from a psychiatric perspective.

In addition to understanding the mental health and substance abuse problems of delinquents, another intriguing line of research involves the frequency and type of personality trait disturbances and even personality disorders among youthful offenders. As we know from the groundbreaking research by Robins (1966; Rutter et al., 1999; Zoccolillo, Pickles, Quinton, & Rutter, 1992), such problems deserve special attention, because they predict in many cases transition to Antisocial Personality disorder and perhaps even psychopathy (Hare, Hart, & Harpur, 1991). Not surprisingly, adjudicated delinquent adolescents often meet the criteria for conduct disorder (CD), oppositional defiant disorder (ODD), and attention deficit-hyperactivity disorder (ADHD) (Atkins et al., 1999; Steiner, 1999). In some of our earlier research, we have found that delinquents may not be pure conduct disorders, but rather delinquents are often comorbid in that they can be diagnosed with conduct disorder and another one or more diagnoses. In a sample of clinically-referred delinquents in custody, 38% were found to have conduct disorder and at least one other internalizing diagnosis (e.g., depression, PTSD), 26% had CD and at least one other externalizing diagnosis (e.g., ODD, ADHD), and 22% had CD by itself (Steiner, 1999).

An examination of stable personality traits (i.e. non-syndromally defined characteristics) of delinquents also offers an interesting portrayal, and these traits may have predictive value in regard to recidivism and lifetime persistent criminality. One research tool that we find very promising in terms of depicting delinquents (and one that is currently being used in the CYA TNA screen) is the Weinberger Adjustment Inventory (WAI; Weinberger & Schwartz, 1990). The WAI assesses broad personality functioning along two major dimensions: distress (e.g., anxiety, depression) and self-restraint (e.g., suppression of aggression, consideration of others). A four-quadrant typology is created by intersecting the two dimensions at age-appropriate means. Steiner and his colleagues (Steiner et al., 1999) utilized this typology to predict recidivism rates among serious institutionalized juvenile offenders. The four types are: 1) Reactive (high distress, low restraint); 2) Suppressor (high distress, high restraint); 3) Nonreactive (low distress, low restraint); and 4) Repressor (low distress, high restraint). Steiner and his colleagues (Steiner et al., 1999) utilized this typology to predict recidivism rates among serious institutionalized juvenile offenders. Interestingly, nearly 90% of the nonreactives were rearrested in the 4 ½ years follow-up. In contrast, less than 50% of the suppressors were rearrested. Findings from this study highlight the importance of examining personality traits and the implications for delinquency prevention and treatment.

Based on findings from previous studies and from our own research, we have formulated a model of persistent delinquency based on psychopathology. We believe the model will provide a framework and ultimately prove important in assessing the CYA mental health system and for developing improvements and recommendations. Importantly, the steps delineated below can be accomplished from reviews of data already collected and from the methodology we used in the current report.

A Model of Persistent Delinquency Based on Psychopathology (Steiner & Redlich, 2002, Steiner, 2002)

Defining psychopathology as a "harmful dysfunction," Wakefield (1992) states that 1) a condition causes harm or deprivation of benefit as judged by social norms (and evolutionary purpose); 2) results from the failure of some internal mechanism to perform its natural function - (an effect that is part of the evolutionary explanation of the mechanism); 3) It results in adaptive failure - lack of progression in stage-salient tasks and competencies. We would like to add to that definition the notion that the condition has become context independent (i.e., mostly internally driven) in two specific ways: It is independent of social context, i.e., it occurs in all different social settings, as benign and supportive as one can imagine. And it is also independent of the developmental phase of the person who is so affected - temporal context no longer defines the person's conduct and thought. Some forms of delinquency, and hopefully most of the ones associated with the label of conduct disorder will be able to be viewed from this perspective. Such a model that is compatible with developmental principles will assist us in identifying the causal processes that are involved and get us beyond the currently descriptive phenomenology, which may or may not offer advantages over simple criminological classifications. The model should additionally and increasingly provide us with the needed sophistication to discern those who are very likely to persist in patterns of crime despite all kinds of escapes provided, and ultimately lead them to intensive and new forms of treatment which have a higher chance of being successful than our current rationalistic appeal to their consciences, sense of responsibility and ability to think things through.

The impetus for introducing this model into the study of delinquency derives from two lines of empirical evidence. First is the relative lack of success of purely criminological approaches to improve outcomes in delinquent youths (Steiner et al., 1999). Usually, juvenile delinquency has been handled by placements outside of parental homes, removal of parental rights, counseling sessions, and supervision of schooling. During confinement, juveniles receive similar services in a more intensive fashion. Such interventions, however, produced few positive results: several reviews from the past decades end on a very pessimistic note (Bartol & Bartol, 1989). In the state of California alone, the population of incarcerated juveniles has increased dramatically in the 10 years between the mid-eighties and -nineties (Tinklenberg, Steiner, Huckaby, & Tinklenberg, 1996), while recidivism rates of 67% within 4.5 years of their release have been reported (Steiner et al., 1999). From our perspective, such lack of response to generic treatment or selective incapacitation, as incarceration is referred to often in the criminological literature (Haapanen, 1990), suggests the presence of a substantial psychopathological component in delinquent youths. In many cases, their behavior has become independent of social context--one of our defining criteria for psychopathology (Steiner & Hayward, 2000).

The second impetus for our model is the fact that there is an accumulating body of evidence that prevalence rates of psychopathology, as traditionally defined within psychiatric nomenclatures are exceedingly high in delinquent populations either on parole or within confinement. Coccozza (1992) first called attention to this fact in the early nineties. As mentioned above, studies of specific diagnoses yielded very high prevalence rates of PTSD (Cauffman et al 1998; Foy et al, 1996; Steiner et al 1997), Dissociative Disorder (Carrion & Steiner, 2000) and other diverse psychopathology, especially in comparison to non-clinical populations and on par with prevalence rates found in hospitalized clinical populations (Atkins et al., 1999; Pumariega et al., 1999).

In the first results of the screening study carried out in the California Youth Authority, we found that using standardized measures of psychopathology (Youth Self Report, Achenbach, 1991) in approximately 3,638 youths (mean age = 16 years, 92% boys), 20% of boys and girls were in the clinical range on Internalizing Disorders, and 19% of boys and 30% of girls were in the clinical range on externalizing disorders. These numbers are all the more impressive given the fact that this self report instrument tends to under-estimate the rate of psychopathology in this population, when compared to structured interviews, such as the DISC (Atkins et al., 1999) and compared to other screening instruments, such as the MAYSI, (Grisso, Barnum, Famularo, & Kinscherff, 1996) specifically constructed for delinquent populations (Haapanen & Ingram, 2000). As has become clear from the studies of Atkins and colleagues (1999), results on the YSR most likely tend to underestimate the true prevalence of disorder in juveniles, leading us to think that when cutting edge structured diagnostic interviews are applied we will most likely see a higher percentage of psychiatric morbidity. More importantly, these scales correlate highly with some personality measures, which have been shown to contribute to criminal recidivism, when age at first offending,

number of previous convictions and severity of current offense were held constant (Tinklenberg et al, 1996; Steiner et al, 1999). The variable of Restraint, an obverse measure of impulsivity, is significantly related to the Total psychopathology score on the Youth Self Report (r = -. 64), the Externalizing subscale (r = -.81), and the Internalizing subscale (r = - .33). This suggests that as the youth identifies internalizing problems (such as anxiety and depression) or externalizing problems (such as aggression and other disturbances of conduct), their self-reported restraint level (i.e. ability to abstain from impulsive action) decreases. This confers upon these morbid youth higher likelihood of recidivism 4.5 and 10 years out, as shown in our previous prospective studies (Steiner et al., 1999, Tinklenberg et al., 1996). The relationship between externalizing problems and restraint is much stronger than with internalizing ones, as one would expect, but the correlation with internalizing problems is not inconsequential, indicating that both types of problems can put youths at increased risk for lifetime persistent patterns of crime.

Conclusions based on the analysis of the literature up to 2001

Juvenile delinquency is likely to remain a serious problem in the United States for the foreseeable future. Our recent insights into the improved delineation of delinquency from psychopathologically driven antisocial behavior provides us with new opportunities to provide useful psychiatric assistance to the juvenile justice system. Delinquency is often accompanied and/or driven by high rates of coincidental and/or causal co-morbidities. Effective treatment programs for delinquency should use multi-modal approaches tailored to each youth's particular set of psychopathologies. We have suggested that the extensive co-morbidity observed in cases of delinquent children may provide a convenient sub-classification scheme, since many of the comorbid conditions have immediate management and treatment implications (Steiner, 1999). But is also quite likely that the sheer accumulation of comorbid diagnoses will have prognostic implications, as it becomes more and more difficult to address each illness in an appropriate manner. Highly compounded psychopathology seems likely to affect multiple domains of functioning and make treatment more difficult, but this hypothesis has yet to be appropriately tested.

B. Results of the current project

" Juvenile delinquency as a total problem is in fact the outcome of many and complex factors and until the effects of these are studied together in an adequately planned and combined research the weight to be attached to each will remain unknown."

John Bolwby, Forty-Four Juvenile Thieves, 1947

B.1 The results of the CYA Treatment Needs Assessment (TNA) data and the Structured Interview data project

In 1996, the CYA created an assessment package that included a mental health/personality component and a substance abuse component, commonly referred to as the Treatment Needs Assessment (TNA) (see Haapanen & Ingram, 2000 for a full report). The goal was to implement a process by which standardized mental health and substance abuse information could be gathered routinely on all wards entering CYA institutions. This information would be used to make programming decisions for individual wards and to establish estimates of mental health and substance abuse treatment needs for the institution and parole populations, as well as identifying wards at risk..

Youth Authority clinical and research staff and researchers from Stanford University developed and field-tested a mental health screening/assessment procedure that drew on extant, standardized, automated assessment tools. Four measures were included: the Weinberger Adjustment Inventory (WAI; Weinberger & Schwartz, 1990), the Youth

Self-Report (YSR; Achenbach, 1991), the Massachusetts Youth Screening Inventory (MAYSI; Grisso, Barnum, Famularo, & Kinscherff, 1996), and the Drug Experiences Questionnaires (DEQ). The WAI provides measures of personality traits and long-term functioning. In contrast, both the YSR and the MAYSI focus on short-term mental health symptoms. Finally, the DEQ assesses substance use and abuse.

The CYA (Dr. Rudy Haapanen) and Stanford University (Dr. Hans Steiner) conjointly received a grant from the National Institute of Justice (NIJ) to investigate whether the TNA package is a valid and reliable tool that can accurately identify wards with mental health and/or substance abuse problems. The NIJ study consisted of randomly selecting wards who had completed the four self-report TNA measures and administering semi-structured diagnostic clinical interviews. The clinical interviews were used as the gold standard to which to compare the self-report responses. In this manner, it was possible to examine if the objective data gained from the diagnostic interviews mapped onto the subjective data provided from the wards themselves. In this report, we describe the prevalence of mental health, sex offender and drug and alcohol treatment needs within the current ward and parolee population obtained from the TNA and structured interview data.

In order to understand the prevalence of mental health, sex offender and drug and alcohol treatment needs within the current ward and parolee population, we examined the structured interview data obtained.

The males included in the TNA and interview samples are representative of the males in the general population of the YA (see Table 1). On average, males in the sample are younger (mean age = 16.8 years) than males in the YA population (mean age = 19.4 years). However, this is because our sample is comprised of wards entering the system, a cohort which is, of course, younger than the general population. The ethnic make-up of males in the sample and males in the population are closely matched. Females included in the present sample are also representative of females in the general population. Like males, the sample females are younger (mean age = 16.6 years) than population females (mean age = 18.8 years). There are also slightly more Hispanic and slightly less Caucasian females included in the sample than are represented in the YA population. Other ethnic backgrounds appear similar. Overall, efforts were made to randomly select a representative sample for both genders.

Table 1. Demographics of CYA Sample Compared to CYA General Population

Demographics	Females N=140	CYA Female General Population	Males N=650	CYA Male General Population	Total N=790	CYA General Population
Age	16.6	18.8	16.8	19.4	16.8	19.4
Hispanic	39%	29.6%	49%	48%	47%	42.7%
African American	29%	30.8%	28%	29.8%	28%	29.8%
White	25%	32.1%	15%	15.4%	17%	16.2%
Asian	1%	2.5%	6%	4.5%	5%	4.5%
Native American	4%	2.5%	1%	0.7%	1%	0.8%
Filipino	0%	0.6%	>1%	0.5%	>1%	0.5%
Pacific Islander	1%	1.3%	>1%	0.5%	>1%	0.6%
Other	1%	0.6%	1%	0.4%	>1%	0.4%

[1] Research Division, Ward Information and Parole Research Bureau Information Systems Unit; Characteristics of CYA Population June 2001

Initially, 1000 wards were to be interviewed but because of time and budgetary constraints, data was collected from 866 wards, which is still the largest database of mental health information for juvenile offenders to date that we are aware of. Normal attrition rates of approximately 20% were also expected. Because of the small percentage of females in the YA, female offenders were oversampled in order to ensure a number sufficient to conduct statistical analyses. It was of great interest to compare and contrast males and females in regard to their mental health and substance use portraits, as we were expecting different profiles and needs, thus requiring that a higher percentage of females be interviewed.

Our final sample of wards consisted of those who entered the YA system between the months from October, 1997 to June, 1999 for females, and between October, 1998 to February, 1999 for males, and who had completed the intake TNA, the reassessment TNA, and/or the diagnostic interview. Although diagnostic interview data was collected from 866 wards, approximately 76 wards were interviewed who did not enter the system during "the intake months." Thus, the final diagnostic interview sample was 790 wards, which is the sample we will use for the prevalence of mental and substance abuse problem analyses. The final TNA sample ranged from 696 to 719 wards (differences depend on missing data and invalid scores), which is the sample we will use for the screening analyses.

Our next step was to match the TNA data with the interview data. The reassessment TNA data (as opposed to the intake TNA data) was selected for use because of its close proximity in time to when each form of data were collected. In this manner, we could be more confident that if wards were experiencing problems both the interview and self-report measures would capture the relevant information. We could also rule out possibilities of adjusting to incarcerated life, missing home-life and friends, etc.

As we expected and predicted from our preliminary analyses of these data prior to August 2001, the findings did not change dramatically when reporting on the full data set. Our analyses reveal an extremely high prevalence in the CYA population of psychiatric problems such as conduct disorder, substance abuse, and anxiety disorders. Indeed, tragically few wards of the CYA are *without* one mental health problem or another. (See Table 2 and Figures 1-2, for a summary of the data).

Prevalence rates often far exceeded rates found in the general population, particularly for female wards. For instance, according to the American Academy of Child and Adolescent Psychiatrists (AACAP), approximately 9% of children and adolescents in the general population meet the criteria for an anxiety disorder. In contrast, 55% of female CYA wards and 26% of male wards meet the criteria for an anxiety disorder diagnosis. Additionally, wards had higher rates of personality disorders, such as Narcissistic and Antisocial personality disorders

Table 2. Comparison of psychopathology across previous studies of incarcerated juveniles.

Criteria	Georgia DISC-2	South Carolina DISC-PC 2.3	CYA SCID N=790	General Population[1,2]
Mean Comorbidity		2.4 (2.7)	4 (2.1)	0
Mood (Mania/Bipolar & Depression)	19%	24%	12%	.5-6%
Anxiety	30%	33%	31%	8.7% AACAP
Psychosis		45%	4%	1%
Substance Use Disorders	30%	20%	85%	4.9% for alcohol dependence 1.9% for illicit drug dependence[3]
Disruptive Behavior	35%	43%	95%	4-20%
ODD	13%		27%	2-16% DSM
ADHD	7%		10%	3-5% DSM
Conduct Disorder	29%		93%	2-9% under age 18, DSM

While the high incidence of Substance Use and Abuse and Disruptive Behavior Disorders is expected, we wish to draw special attention to the high prevalence of internalizing disorders in this population. These disorders tend to be under-diagnosed, as we have documented (Steiner, Garcia & Matthews, 1997), for complex reasons associated with ward characteristics, CYA systems intricacies and special disorder characteristics which interact to produce very low identification rates. Yet these conditions account for many impulsive and aggressive acts, which most likely could be avoided if the internalizing psychopathology was treated according to state of the art protocols. These disorders are very interesting in the context of our analyses, as there are many cost-efficient and effective treatments available, which should be implemented in a coordinated fashion.

We also wish to draw special attention to the high rates of Substance Abuse and Dependence in these youths, which antedated their period of incarceration – see **Table 2**. These findings, while not surprising, call attention to the fact that effective treatment for these problems may result in a reduction in future criminal recidivism like that seen in adult incarcerated populations (Lurigio, 2000; Schildhaus et al., 2000) These disorders should receive much deserved attention and services of the highest quality in hoped to improve the live of these children.

[1]American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington, DC, American Psychiatric Association, 1994.
[2]AACAP
[3] Source: Folsom, RE, Judkins, DR. (1997). Substance abuse in states and metropolitan areas: Model-based estimates from the National Household Surveys on Drug Abuse. Rockville, MD: SAMHSA Office of Applied Studies.

We also call attention to the generally higher levels of psychopathology encountered in females throughout our analyses to date. The gender specific differences in pathology mandate special attention to programming for females in the system.

An extremely high level of comorbidity (co-occurrence of psychopathology) exists in the sample. High levels of comorbidity demand that our services be sophisticated, integrated and delivered in a continuum of care. From this aggregation it is clear that multimodal intervention will be required to achieve positive results. At some point it would be desirable to disaggregate these disorders by documenting their relative appearance in the patient's development, thus potentially assigning a primacy to some of these disorders, which could be important for determining the etiology of problems and targeted interventions.

Despite the youthfulness of this sample, most individuals already fulfill criteria for personality disorders, attesting to the chronicity and pervasiveness of their adaptive malfunctioning (see Figure 1).

In order to confirm that those who are found to be psychiatrically morbid by structured interview also self reported a higher degree of pathology, we also compared WAI and MAYSI scores for wards who did and who did not have a positive in the five clusters to examine convergent validity of the two different methods of examination. For both self-reports, we conducted univariate analyses of variance (ANOVAs) controlling for age and gender (Tables 3a and 3b). Our dependent variables were WAI Distress and Restraint and the MAYSI total score. The independent variables were the five clusters (yes/no dichotomy, indicating disorder or not). In general, wards who had a "yes" for each cluster were significantly more distressed, more impulsive, and had more mental health problems as measured by the MAYSI (Table 3c**.),** all Fs (1, 323-718) $\geq$ 8.02, ps $\leq$ .005. There was one exception, however. Wards who did and who did not fall into Cluster III (somatoform, eating, and adjustment disorders) did not significantly differ in their levels of WAI restraint, F (1, 692) = 0.73, p = .40. Thus, as expected, wards with more problems as indicated by our diagnostic interviews were also found to have more problems as indicated by the primary dimensions in the self-report data. Conversely, those who in all likelihood did not have significant psychopathology, such as Cluster IV, did not show any significant differences, confirming the validity of the diagnostic clusters further.

Next, we examined the effects of accumulated psychopathology onto self-reported problems. We conducted correlations between comorbidity rates and WAI distress and restraint scores. We expected that wards with more problems would have higher rates of distress and lower rates of restraint; this is exactly what we did find, even when pervasively common disorders (such as Conduct Disorder or Antisocial personality Disorder) were excluded.

Table 3a. Distress level by cluster

WAI Distress	No/Yes	N	Mean	F value	**Sig**
Cluster 1:	No	343	2.134	**84.051**	**.000**
	Yes	350	2.591		
Cluster II	No	584	2.299	**32.717**	**.000**
	Yes	109	2.718		
Cluster III	No	655	2.344	**10.036**	**.002**
	Yes	38	2.721		
Cluster IV	No	184	2.124	0.002	.962
	Yes	140	2.139		
Cluster V	No	129	2.035	**8.023**	**.005**
	Yes	195	2.194		

Table 3b. Restraint level by cluster.

WAI Restraint	No/Yes	N	Mean	F value	**Sig**
Cluster I:	No	343	3.512	**61.410**	**.000**
	Yes	350	3.110		
Cluster II	No	584	3.384	**43.045**	**.000**
	Yes	109	2.906		
Cluster III	No	655	3.313	.726	.395
	Yes	38	3.236		
Cluster IV	No	185	3.539	0.251	.617
	Yes	139	3.480		
Cluster V	No	130	3.624	**8.361**	**.004**
	Yes	194	3.440		

Table 3c. MAYSI composite by cluster.

MAYSI Composite	No/Yes	N	Mean	F value	**Sig**
Cluster I:	No	354	1.4985	**95.900**	**.000**
	Yes	356	2.3121		
Cluster II	No	607	1.7698	**60.172**	**.000**
	Yes	112	2.6846		
Cluster III	No	680	1.8673	**16.176**	**.000**
	Yes	39	2.6827		
Cluster IV	No	189	1.4418	0.173	.678
	Yes	145	1.5014		
Cluster V	No	134	1.1871	**21.322**	**.000**
	Yes	200	1.6556		

B.1.2 Conclusions regarding Objective 1

These findings add to our understanding in new and significant ways:

They were obtained with the largest sample in the literature to date, with a combined instrumentation which addresses a range of problems which never have been studied together in other published samples. The instruments, their administration and the combination of variables we are able to describe inspire confidence that we are capturing as accurate a picture as these instruments are designed to deliver in the targeted areas.

The results also confirm our initial suspicion that the psychopathology rates reflected in self-report screens are most likely an underestimate. In order to accurately screen this population and treat them appropriately, we will have to pay particular attention to the false negative rates (i.e., the abnormality is present, but the assessment instrument decides it is absent) in our screening devices.

Although we do not believe that all mental health problems lead to or Acause@ criminality, we do contend that some in fact do, and many (both internalizing and externalizing) can affect adjustment within the YA and/or rehabilitation efforts to impede progress and produce adverse short and long term outcomes. High rates of depression (24% females, 8% males) and anxiety (55% females, 26% males), for example, may influence daily functioning, such as complying with staff requests, having agreeable relationships with other wards, and effectively completing programs necessary for parole and becoming a productive member of society. Certain personality disorders (and certain combinations of personality disorders, such as narcissistic and antisocial) may also lead to fighting and other antisocial acts incompatible with institutionalized living. Indeed, personality traits, such as self-restraint, are predictive of recidivism rates 4 2 and 10 years after release from the CYA. Thus, it is imperative to begin to more fully address the some of the mental health disorders that are less severe in terms of needing immediate attention but can have a significant impact on daily functioning nonetheless. We believe this will decrease the number of disciplinary infractions within the CYA and increase the number of wards who desist their criminal behavior upon leaving the CYA.

Additionally, co-morbidity – or the co-occurrence of disorders was extremely common. The majority of males and females meet the criteria for three to five diagnoses on average. The number of diagnoses was also positively related to distress and self-restraint levels, which as we mentioned above can affect recidivism rates. Although certainly the type of disorder is an important indicator for treatment and rehabilitation plans, the sheer number of diagnoses is also important for prognosis and success after release. Chances are that extensive comorbidity requires more intensive assessment and management in specialized programs until stabilization is achieved. Many times, treatment of one disorder is influential in treatment of other comorbid disorders. Therefore, in addition to examining the types of mental health problems wards have, the number and co-occurrence of disorders should be examined as well.

And finally, the comorbidities encountered in this population cluster in ways that might be helpful for designing treatment programs, and develop more targeted interventions. For instance, the high number of substance dependence problems mandates that our screening for these disorders be most accurate, that state-of-the-art programs are in place to treat them. Similarly, the high number of anxiety and mood disorders mandates that we apply what is known from modern psychopharmacology to these cases, apply sophisticated mediations in sophisticated combinations and algorithms for targeting treatment non-responsive cases, to provide a basis for personal change.

B.1.3 Limitations

The results of our study also have several limitations: We did not assess all possible diagnoses in this sample, as the protocol, in its current length, already taxed this disturbed and difficult population. We have limited information on medical pediatric and neurological disease, which might contribute to these problems, there being a significant overlap between pediatric, especially chronic pediatric illness and psychiatric comorbidity (Offord, Rae-Grant et al, about 1994; Steiner & AACAP, 1997). Some of these additional diagnoses could only be obtained by performing more extensive and more invasive and intrusive tests which would be difficult to execute in this rightfully protected and problematically cooperative population. Most likely, such information will be derived from smaller scale and intensive studies such as this one, since the others will be difficult and expensive to conduct.

Certain diagnoses are so ubiquitous as to be not particularly helpful in this population. The current diagnostic algorithms for antisocial personality and conduct disorder lead to these diagnoses in almost all of the youths described. While at one level this is comforting, given that these youths indeed should have a very high prevalence of these disorders in light of their crime histories, it cannot be expected that these labels will, in their present form

contribute to our predictive powers in incarcerated juveniles. New models will be necessary, which we will have to develop in the future, and test for their discriminant and predictive validity. Examining comorbidity clusters as suggested by our a priori and empirical cluster analyses, and developmental ordering of primacy of disorders are promising strategies.

These mental health problems should be treated effectively both for the sake of the wards of the CYA and for the larger society who will deal with them upon their release.

B.2 Review of the current screening procedure and suggested possible improvements leading to better identification and service delivery

In this project we hoped to learn how the CYA is detecting, assessing, and treating the psychiatric problems of its wards today, and, how it can do so more effectively and efficiently in the future. To this end we linked existing paper and pencil screening data, to the structured interview data which we just discussed above. For the purposes of this analysis, the structured interviews become the "gold standard" against which the screening instruments are being measured. In considering the adequacy of each instrument, we took into account the cost of the instrument (real and staff time to administer and score), taxation of ward's abilities to complete; theoretical coherence with diagnoses measured; performance in both genders; number of cases correctly classified, and false-error rates.

Another issue to consider concerning the TNA measures is the degree to which wards take the measures seriously. Whether they understand the questions being asked, and whether they are trying to answers questions truthfully are important considerations. Only the WAI and the DEQ examine this issue empirically with validity scores. Respondents are asked if they are answering honestly and carefully. Generally, the vast majority of children comprehended the test and answered to the best of their abilities, with some help from the staff. Twenty-three wards (less than 4 %) had to be excluded from analyses (along with their interview data) because they did not reach the preset score of validity. Other pragmatic problems arose around scheduling because wards were paroled or interviewers did not have the time to test all of the wards. Presumably, once the screening procedure has become firmly embedded in the daily operations of the CYA these difficulties can be minimized. However, we still were able to capture about 87% of those wards who had completed interviews for the second TNA testing.

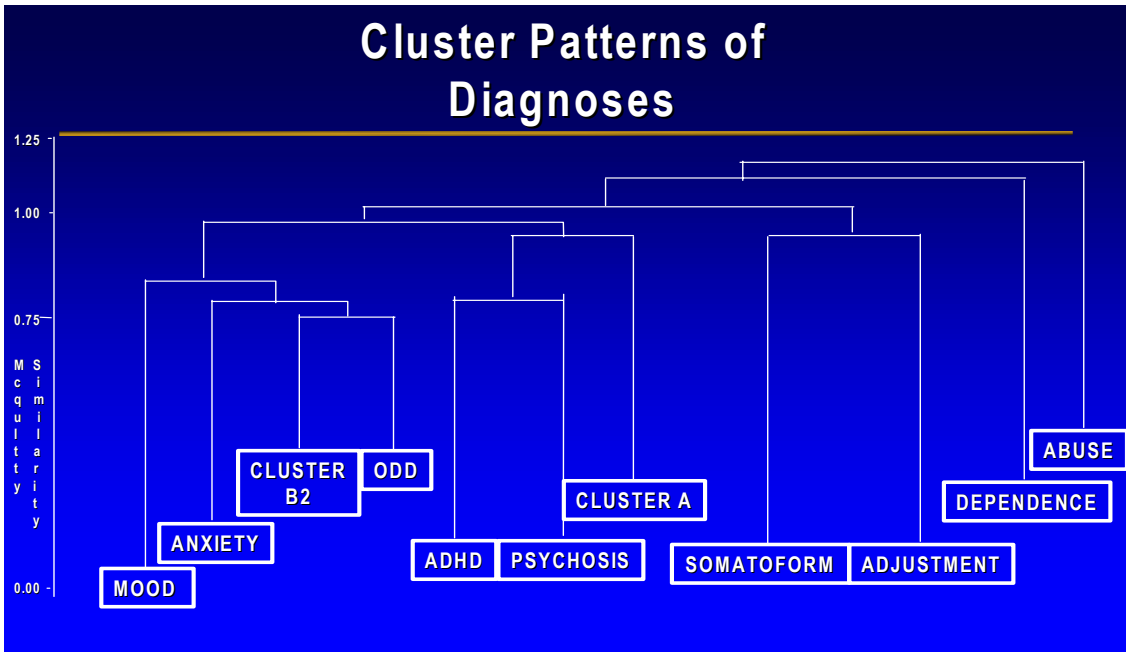
In order to test the associations between screens and structured interviews, we used a variety of statistical procedures including descriptive approaches, logistic regression with odds ratios, Chi Squares and Kappas, signal detection analysis, and ROC analysis to evaluate how well current screening procedures detect different psychiatric disorders, taking in to account their different base rates (this is an important distinction because rare disorders are always more difficult to detect). We did these analyses by instrument and gender; and finally explored the optimal mix of screens in a range of procedures.

B 2.1 Reduction of Interview Data

Prior to actually testing the ability of the current screening package to contribute significantly to the accurate detection of psychiatric disorders in this sample, we needed to perform data reduction analyses in order to generate clusters of diagnoses which would produce meaningful results

Structured Clinical Interview for DSM-IV Axis I Disorders--Clinician Version (SCID-CV; First et al., 1997), Structured Interview for DSM-IV Personality (SIDP-IV; Pfohl et al., 1997) and the Diagnostic Interview for Children and Adolescents (DICA; Reich et al., 1991) yield numerous diagnoses, too numerous to conduct analyses on each one. Thus, to reduce the number of diagnoses, we first devised a priori clusters of what diagnoses we thought would go together, based on clinical experience in this population and treatments usually found effective in these clusters, and then we tested our a priori hypotheses by conducting a cluster analysis. The results of the cluster analysis are presented in Figure 5a.

Fig 5a.



The statistical analyses confirmed our expectations. The first cluster to emerge, Cluster I, consisted of mood disorders, anxiety disorders, borderline personality disorder (BPD), and oppositional defiant disorder (ODD). The fact that these disorders go together makes clinical sense, based on what we know of their etiology. They would primarily be treated with antidepressants, anti-anxiety agents, SSRIs and mood stabilizers. Fifty percent of wards were present in this cluster.

Cluster II is comprised of psychosis, attention deficit-hyperactivity disorder (ADHD), and schizoid and schizotypal personality disorders. Fifteen percent of the wards were present in this cluster. While there is some commonality of treatment across these diagnoses (e.g., anti-psychotics, especially new atypicals), ADHD would be treated with stimulants and behavior modification. Nevertheless, we believe these diagnoses can be thought of as a package because in contrast to Cluster I, where we find predominant disturbance of mood and affect, we would see predominant disturbance of cognition, thought and attention in this grouping

Cluster III consists of disorders rarely seen in YA wards, and the comparisons to the frequencies in other populations reflects this fact. In contrast to Clusters I and II, disorders in this cluster are most likely coincidental. They in our view do probably not reflect a special association to delinquent behavior, unlike the first two Clusters. Specifically, Cluster III is eating disorders, somatoform disorders, and adjustment disorders. Of the wards interviewed only 1% meet the criteria for eating disorder, 2% for a somatoform disorder, and 3% for an adjustment disorder. Only 5% of the wards were included in Cluster III. In addition to their rarity, these disorders also share a common method of intervention: most likely we would track progress during incarceration (e.g., weight tracking), expecting improvement over time without any specific further intervention. A particularly useful tracking mechanism would be the visits to nurse or general physician. Although eating and somatoform disorders are more likely to be persistent, ultimately requiring treatment, adjustment disorders are usually transient, and maintaining a watchful eye on the ward with adjustment problems is the best treatment available (in terms of optimum efficiency and feasibility at the YA).

Finally, the fourth cluster, Cluster IV, is comprised of alcohol and substance abuse and dependence. NOTE: we changed our assessment to ask regarding these problems as occurring prior to being admitted to the CYA. This was done to protect the wards from self-incrimination, and to get a less distorted picture of their pre-incarceration status. We believe the majority of the wards did not actively abuse substances while incarcerated, not having access to substances; we also know that some probably do. Since it is unlikely that severe dependence would be resolved within the average 6 months that elapsed since incarceration, we still think that these data provide useful information for planning the wards treatment while in the CYA. Therefore, especially important is the distinction between abuse and dependence. Only people who are not included in Cluster I-III are present in this cluster. That is, if a ward met the criteria for depression and cannabis dependence, he would receive a score of "yes" for Cluster I, but a score of "no" for Cluster IV. Because rates of substance abuse and dependence were so high (85%), the overlapping comorbidity with other mental health problems needed to be separated. Our expectation would be that juveniles who suffer from combinations of other disorders and substance abuse problems would hopefully respond to intervention targeting their other comorbidity (e.g., depression). While mood problems can also arise from substance use, at this point we cannot confidently distinguish the order of events in this study. Future studies should focus on these developmental sequences. Thirty-seven percent received a diagnosis relevant to substance use without a diagnosis present in one of the three other clusters. We considered this group to be unique. More specifically, 20% of the sample have problems with abuse and 27% have dependence – requiring long-term therapy along with relapse prevention efforts.

B.2.2 Predicting the diagnostic clusters from the available screening data

The current paper and pencil screening package is made up of the Weinberger Adjustment Inventory (WAI–8 subscales), the Youth Self-Report (YSR–7 subscales), the Massachusetts Youth Screening Inventory (MAYSI–7 subscales), and the Drug Experiences Questionnaires (DEQ). Except for the DEQ, the measures contain separate subscales measuring different constructs, such as depression, anxiety, and suicidal ideation. We utilized these subscales and the DEQ summary score when attempting to predict presence or absence in the clusters. Table 4 summarizes these results.

In the table below, the first column is comprised of both clusters and instruments. Four groupings of instruments were used to measure each cluster, (the MAYSI, the WAI & DEQ, the YSR &DEQ, and the MAYSI WAI & DEQ). Below each cluster are the groupings of instruments. Moving across the table of logistic regression appears a column of false negatives (wards who do have a disorder but are not detected), false positives (wards who do not do not have a disorder but are labeled as having a disorder), and a final column of the overall percent that the measure detected correctly.

Table 4. Summary of logistic regression of clustered diagnoses by instrument.

Instrument	Mean % False Negatives	Range	Mean % False Positives	Range	Mean % Accurate	**Range**
MAYSI	13.92%	(6%-22%)	9.43%	(0-22%)	78.90%	(66%-94%)
WAI & DEQ	13.04%	(5%-20%)	6.86%	(0-18%)	80.06%	(70%-95%)
YSR & DEQ	13.62%	(5%-20%)	7.90%	(0-18%)	79.98%	(70%-94%)
MAYSI, WAI, & DEQ	12.32%	(5%-19%)	10.47%	(<1-16%)	81.30%	(71%-95%)
DEQ	11.6%	(8%-15%)	18%	(10-26%)	65%	(59%-71%)

As seen in Table 4 and Figure 6 all four of the TNA instruments do a sufficient job of predicting membership in the five clusters. For example, for Cluster I, the different combinations of instruments do a relatively equivalent job of correctly classifying membership, ranging from 68.7% to 71.1%. Moreover, the instruments all produce significant chi-square results, have similar and acceptable false negative and false positive rates, and explain modest amounts of variance. A closer examination of Table 4 reveals that the odds ratios are in expected directions. (Odds ratios over 1.0 indicate a risk for disease, whereas less than 1.0 indicates a protective factor.) For example, for Cluster II when the WAI and DEQ was used to predict membership, younger age, higher levels of restraint and consideration of others protect against having one of the disorders in Cluster II, whereas having a low self-esteem puts one more at risk. And, finally, it is important to note that in addition to age and gender, different subscales are significantly predicting membership. Using the same example as above, it is noteworthy that low self-esteem, impulsivity, and consideration of others helped to significantly predict membership in Cluster II in addition to age of the ward. Otherwise, simply asking the ward's age would be sufficient to classify wards into the different clusters. Overall, the results of these logistic regressions will prove helpful in conducting the signal detection analyses which will provide a more finely grained picture and will provide cut-points to be used to correctly diagnose and treat wards.

When the DEQ was entered singly into a logistic regression to predict classification into Clusters IV and V (the alcohol and substance abuse/dependence clusters), 65% of wards were classified correctly. Although this rate is acceptable, it is lower than any of the other instruments. Most likely this is a function of its brevity and its highly specialized nature (to detect SUD's). When the MAYSI, the WAI, and the DEQ are used in combination to predict presence of disturbance, it adds to the accuracy of the other instruments. As it is short and free, and because SUD's are such an important and prevalent problem in this population, we would recommend retaining it in the screening package.

Thus, because all the instruments perform well, consideration of cost must be taken into account, which includes monetary costs as well as costs in time of administering the measures and compensating staff. For cost reasons, we recommend using the MAYSI, the WAI, and the DEQ, and to cease using the YSR. The YSR is the only measure that requires spending actual money for its use. It is the longest of all the instruments. Also, the YSR was developed for non-delinquent youths, thus biasing the actual picture of mental health problems present in YA wards. Additionally, the MAYSI, the WAI, and the DEQ are a suitable combination. The MAYSI measures problems being

currently experienced, the WAI measures personality traits more consistent over time, and the DEQ provides an accurate assessment of substance use problems. Together, these three questionnaires explain the most variance (in comparison to other combinations of measures), identify the highest percentage correct in clusters, and do not cost too much in terms of time and nothing in money.

B.2.3 Conclusions regarding Objective 2

On the basis of these results we feel that the current screens will deliver adequate information to begin an evaluation process in the CYA. The most cost effective package seems to be the MAYSI and the WAI (total number of questions: 114; Cost: None); These two cover syndromal and trait evaluations which should be tested in the future for their relative and conjoint contributions to predictive validity in this population. We would still retain the brief DEQ to augment questions relating to one of the core problem areas, SUD.

While all the screening instruments show significant statistical associations with diagnostic clusters, we still would need to test them further by signal detection analyses to develop specific cut points for clinical use and algorithms for clinicians and staff to follow. Some of this work has been done for the MAYSI; encouragingly, it has acceptable psychometric properties as an "up front" screening instrument (Grisso et al., 2001). The same analyses would have to be repeated with the MAYSI and the interviews, as well as the other scales. This we would do as a follow up analyses once we have finalized the screening package. We would suggest that these cutpoints be developed conjointly with a group of clinicians from within the CYA to ensure optimal fit and performance of these screens. These follow up analyses also would result in the development of a standardized clinical evaluation procedure which then could be used across camps and institutions, integrate the screening data into a particular ward's treatment plan, and begin the continuum of care which forms the backbone of our recommendations (see below, B.4).

B.2.4 Limitations

We have no information on cognitive functioning, neurological and medical pediatric impairment; we need to add standardized and systematized information to the existing screen to round out the picture. At that point we should retest the screens together to recalibrate their usefulness.

B.3 To review existing services in the CYA and suggest improvements based on best practices nationwide.

B.3.1 Information gleaned from the CYA:

The California Youth Authority comprises 4 camps and 11 institutions, the latter of which we examined for the purposes of the current study (see Appendix C: Institutions). There are several programs available for the individual treatment needs of the ward: the Intensive Treatment Program (ITP), Specialized Counseling Program (SCP), Substance Abuse Treatment Program, Sex Offender Program, and the "Regular Program" for the general population (GP). Eligibility for placement in one of the individual programs is established at initial intake, i.e., at one of the three reception centers across the state (NYRCC, SYRCC, Ventura Youth Correctional Facility [VYCF]). However, if a ward in the general population de-compensates later in custody, she or he may be re-evaluated for transfer to a treatment program (i.e., SCP or ITP).

The ITP Program is reserved for those wards who exhibit symptoms of moderate to major mental illness (e.g., schizophrenia, psychosis, depression, bipolar disorder), and thus require intensive treatment. The sole criterion used for this determination is the Global Assessment of Functioning (YA-GAF). However, actual assignment to the specialized programs is made by the Population Management Unit in Sacramento. A designated number of beds at both ITPs and SCPs are reserved for sex offenders (approximately 119 beds). Currently, there are about 273 authorized ITP beds distributed among 6 institutions, including 47 females at VYCF. The ITP beds represent 4% of the total number of (N=6453 authorized beds)[4] in the CYA. In 2001 an average of 5-10 wards were on the waiting list to enter an ITP. The average length of stay in an ITP program is 19 months.[5]

The SCP, originally envisioned as a step-down program from long-term intensive care, is designated for wards who manifest chronic emotional and social disturbances that necessitate specialized, albeit less intensive, care than an ITP. At the present moment there are 246 available SCP beds (representing 3.8% of total authorized beds) across 4 institutions, including a forty-seven bed unit for females housed at Ventura. An estimated one hundred-ninety wards were on the waiting list for an SCP in 2001. The average length of treatment in an SCP is one year

In addition to an ITP and SCP a specialized behavioral treatment program (SBTP) at Preston Youth Correctional Facility for "aggressively mentally ill" wards that require a highly structured behavioral treatment program is scheduled for operation in 2002. These are wards diagnosed with conduct disorders and/or psychopathic and borderline personality, and exhibit self-destructive or aggressive acting out behaviors that disrupt the therapeutic milieu of a standard treatment or general population program.

Relationship of specialized programs to general population beds:

The CYA has a total of 6453 licensed beds. Of these, 2048 beds (or 31.7%) are reserved for higher levels of care, not counting the 75 beds of the new specialized behavioral treatment program at Preston Youth Correctional Facility. There are 273 (4%) beds designated intensive treatment, which is equivalent to intensive residential. The total of 1775 beds (27.5%) reserved for lower levels of care – comparable to day treatment – include 1300 substance abuse (20%); 229 sex offender (3.5%); and 246 SCP non-specified 3.8% (including 47 females housed at Ventura).

[4] Research Division, Ward Information and Parole Research Bureau. Characteristics of CYA Population June 2001. Sacramento, CA: California Youth Authority, 2001.
[5] The average sentence term to the CYA is 2.9 years.

Table 5. Ratio of specialized programs to general population beds

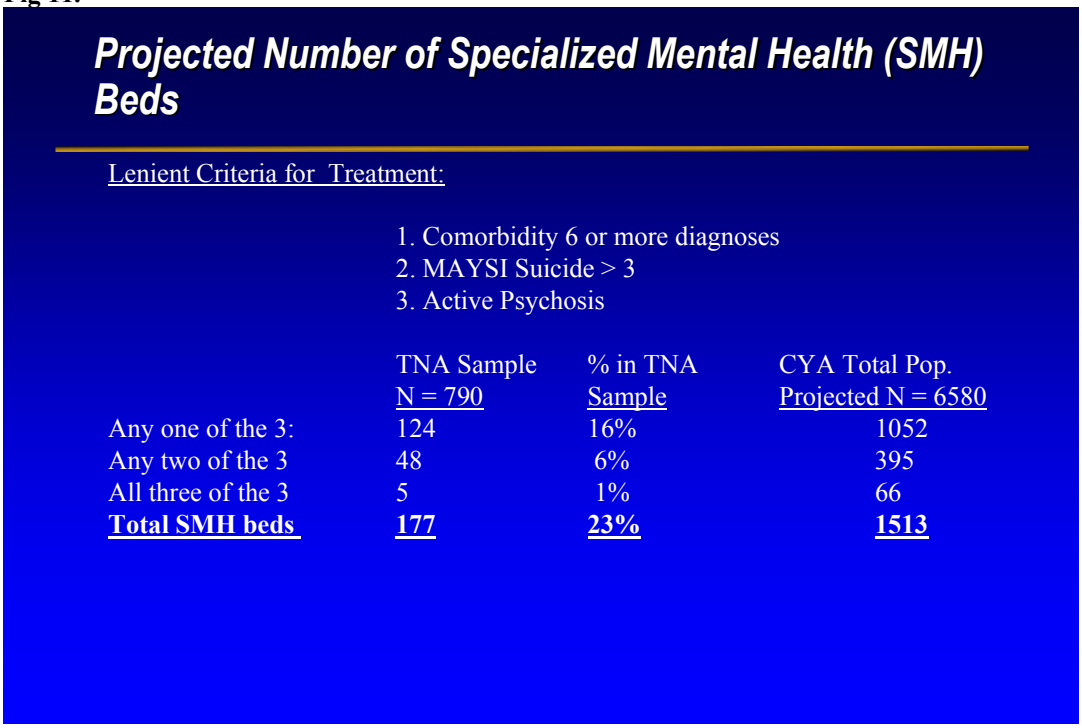
Specialized program	*N* beds	% of total beds (*N* = 6453)
Intensive Treatment (ITP)	273	4
Step-down care	**1775**	27.5
Substance Abuse	1300	20
Sex Offender	229	3.4
SCP	246	3.8
Total Beds	2048	31.7

B.3.2 Comments

The current structure of the programs of the CYA reflects the intent to provide a continuum of care within the institution. Given the complexity of the population served this is highly desirable and needs to be supported. Care must be taken, however, regarding the proportionate allocation of resources to intensive and less intensive treatment. In our opinion, the best way to view this continuum of care is in accordance with the modern medical practice: intensive resources should be brought to bear in crisis situations, for brief periods of time; as soon as the situation has stabilized, the ward is returned to the level of least invasive and restrictive care which nevertheless assures clinical progress. Thus, stays in the most intensive settings should be circumscribed.

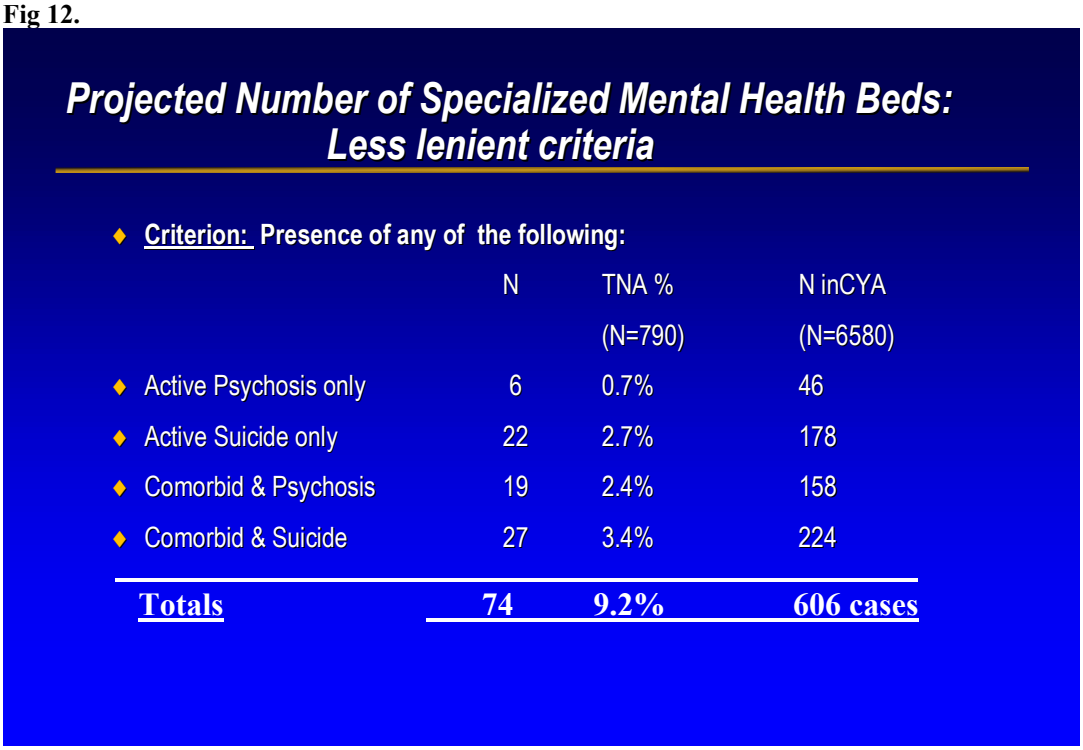
The current distribution of beds and their relative proportions seem reasonable. We first calculated the needed beds on the basis of the presence of *any* of three criteria: co-morbidity greater than one SD in the TNA sample, active suicidality and active psychosis. We then extrapolated these percentages to the total population (see Fig. 11, below). These numbers most likely would reflect all special beds needed (Including ITP, SCP and the new SBTP units).

Fig 11.



Next, we re-examined the issue by using less lenient criteria. See Fig 12 below.

Fig 12.



These analyses suggest that at any given time access to somewhere between 606 and 1513 special beds might be necessary.

From our experience in clinical practice and in working with this population over the past 15 years, we would expect that about 5-10% of this population might be in need of intensive inpatient treatment at any given time; and another 20-30% or some form of step down care, comparable to day treatment. Thus, both by extrapolation from TNA data and by a-priori clinical judgment, the current bed distribution seems adequate. However, we must examine these proportions in relationship to the exact relative frequencies of disorder we find, the potential need for more intensive treatment in any of the described treatment clusters, based on what is known from institutional and evidence-based practice. We will do so below in section B.4.31

A special caution: For those wards unable to return to lower levels of care despite repeated attempts because of severe psychiatric problems, we would suggest alternative treatments. These would not have to be within the CYA necessarily, as some mental health facilities would be much better equipped to handle the most complicated psychiatric disorders. Re-creating such highly sophisticated treatment environments within the CYA might not be a wise use of resources, as they are finite and a disproportionate increase in resources spent on relatively rare disorders requiring intensive psychiatric treatment on a long term basis might lead to a decrease in resources spent on other parts of the population. For instance, to treat a psychotic manic youngster with severe asthma in need of mood stabilizers, antipsychotics, anticholinergics and steroids within the CYA would be prohibitively complicated, expensive and ill advised. This would be comparable to treating kidney failure or respiratory arrest in the CYA. While this could be achieved by instituting intensive care units, it is questionable whether this strategy would be cost effective. To us, it would seem more desirable to refer such youths to other settings that are designed and equipped to handle youths with these problems.

B.3.3. Assignment to special programs.

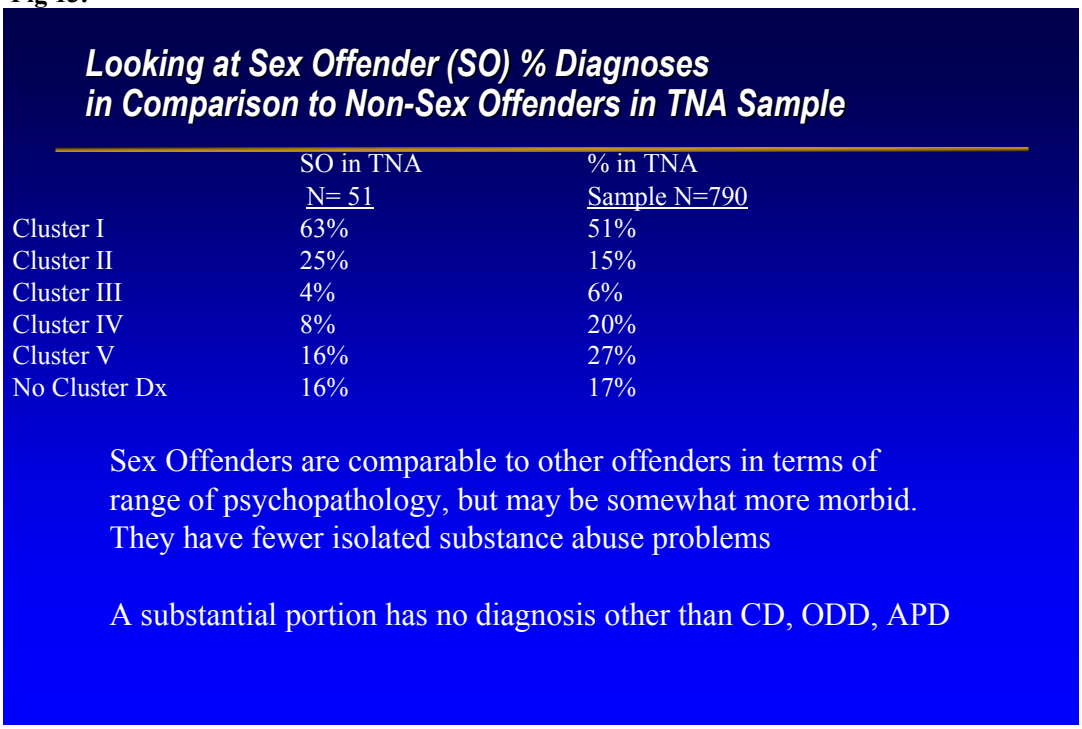
Any continuum of care needs a rational and functional system of deciding how a youngster will benefit from the various components. As mentioned in the previous section, the YA-Global Assessment of Functioning (YA-GAF), based on Axis V of the DSM-IV (APA, 1994) is the measure used to gauge overall level of functioning, and hence, need for a higher level of care. However, the Population Management Unit in Sacramento oversees actual assignment into specialized programs. Though it is useful for planning treatment and measuring its effectiveness, the GAF should not be the only determinant of assignment to a special program or in elevating one's level of care. The type of diagnosis, comorbidity, developmental (and probable causal) sequence of events and available treatments should all be considered. The GAF could instead have a gateway function which triggers a more detailed clinical assessment, which in turn leads to program reassignment approved by mental heath staff. The process would result in a treatment plan which is as specific as possible, delineating not just global malfunctions and symptoms, but also specifying which domains of functioning are disturbed, appropriate treatments for these dysfunctions and when one can expect them to resolve, along with a date for re-assessment which will then determine further level of care.

Additionally, there is another complication in assigning special treatments to wards in the juvenile justice system. Many of the assignments are made by fiat rather than by medical planning, and the recommendations come from entities that are not responsive to clinical input, education or feedback.

Another issue regarding the designation and use of intensive treatment beds arises from the influence the legal status of these children has on their prescribed treatments. The current structure evolved in response to legal demands (all sex offenders and some drug-related offenders need to complete a special program). These needs are based on recommendations by legal bodies and do not always relate to clinical assessments. Thus, someone who sold drugs but never used them might be required to complete a drug program. Similarly, someone who had a casual or situationally determined sexual encounter in the CYA might be required to do a sex offender program. At other times, treatment program recommendations seem to be made on the basis of community sentiment and politics rather than medical clinical need. We strongly advocate the separation of criminological management and rehabilitation resulting from legal infractions, from medical treatment that is driven by medical necessity. While these two interventions may complement each other, they should not be applied indiscriminately or taken as interchangeable. There also are empirical reasons for this recommendation.

In previous and current analyses, we failed to find any appreciable differences between groups, when the grouping factor of a particular criminological characteristic (i.e., a sex offense, drug offense) was used. The distribution of psychiatric disorders is comparable among wards designated as sex offenders and drug abusers regardless of crime committed. They also are equally diverse. For example, as shown in Figure 13, the psychiatric morbidity of sex offenders is as diverse as that found in the general population. We recognize that there are certain necessities dictated by criminological realities, i.e., certain punitive and rehabilitative measures might be necessary from that point of view. However, we suggest that medical treatment plan include individual assessments of mental health needs of wards within a population. Moreover, we must realize that special programs for certain sex offenders and drug abusers will need to have substantial mental health components which address medical morbidity, but this is not true for all sex offenders, based on the profiles we have shown.

Fig 13.



The criminological nomenclature also speaks of treatment while not necessarily referring to interventions such as therapy or medication, which can be quite confusing. We strongly advocate a separation of these functions. We realize that this will raise many complicated issues, but ultimately will have a definite payoff. We are unable at this point to provide the best model for achieving this distinction between criminological rehabilitation and management, where the prime goal is to guarantee safety and security, while holding an individual responsible for their actions; from a medical treatment approach whereby definition the ward is a patient, presumed to be suffering from processes which he does not completely control and which will need external assistance and help to resolve. Historically, the boundary of where one can draw the line with confidence between these different ways of dealing with human infractions has dealt with this issue by the M'Naghten Rule, except in juveniles who were generally held unaccountable because of their youth (see Steinberg and Cauffman 2001 for a fuller discussion). Our findings in the TNA sample raise this issue again, even more forcefully, as we now have to consider the impact of trait and syndromal disturbances. These issues, we submit, can be resolved in Phase Three of our proposed plan for modifying the mental health services in the CYA (see section B.4 below).

B.3.4 Methodology for the assessment of services

The mental health system was examined using three strategies: (1) Site visits to CYA facilities, (2) A survey of the psychiatric treatment satisfaction levels of current CYA wards, and (3) Review and integration of relevant literature on best treatment practices. We describe each of these methods in turn below:

(3.41) Site visits. All eleven CYA facilities were site-visited, typically by teams of 2-6 researchers of varied professional backgrounds. The structure and process of each site visit varied, depending on the nature of the facility, the availability of its staff for interviews, and the programs and services it offered. In general, site visits involved talking with facility administrators and individual clinicians, touring programs, and where possible, having discussions with wards. At the same time, the project team also created an inventory of common forms of addictive and psychiatric treatments, looked at written program materials and treatment plans (e.g., substance abuse

counseling, 12-step groups, various medications, inpatient psychiatric care) and specifically discussed each with staff.

(3.42) Inventory/Measures (see Appendix B) Separate from the site visit, each program also completed a telephone interview (inventory) concerning their structure, staffing and services. The source of the inventory was a combination of inventories used for similar purposes, for example in the Substance Abuse and Mental Health Services Administration's Annual Uniform Facility Data gathering effort at all facilities providing psychiatric services, The Drug and Alcohol Program Survey designed by Dr. Humphreys to assess services in hospitals, and the Residential Substance Abuse and Psychiatric Programs Inventory. All of these measures were modified for application to the CYA sites (e.g., references to outpatient services deleted). Our team has published several similar surveys and is well acquainted with the methodological issues involved in instrument development and adaptation (e.g. The Response Evaluation Measure, Steiner, Araujo & Koopman, 2001; The Juvenile Wellness and Health Survey, Steiner et al, 1998). The advantage of the interview was that it was standardized whereas the site visits were not. The disadvantage of the interview is that all data were recorded as reported by staff to their best of their knowledge, but not subject to independent verification by the consultants such as they could do on a site visit. In these senses, the interview and the site visits trade off each others' strengths and weaknesses and thus provide together a better picture of the state of the system than would either on its own.

B.3.5. The state of mental health care system in the CYA

B.3.51 Character of the various programs

While the relative distribution of beds and the pathways linking them form an important basis for clinical operations, the exact structure and content of treatment at each of those facilities is the vital component which makes the continuum of care function. We now report on the characteristics of the programs as we encountered in the CYA

General Population Programs
In general, the organizational culture of most CYA facilities is not conducive to mental health treatment. With the exception of the Karl Holton facility, the dominant organizational culture of the facilities was one of criminal justice/corrections, with some mental health added in as a secondary, or even tertiary consideration. For example, criminal justice considerations (e.g., sentence length) dictate program placement more than clinical need, many YCCs construe their role solely in terms of corrections and control and have no training in mental health, and many mental health staff feel that their input on facility operations is ignored. Particularly in the context of high security "end-of-the-line" facilities, mental health programs are situated in a culture so different from mental health treatment as to have difficulty being effective. Such correctional facilities are clearly a necessity and their value is not questioned per se. Rather, the question is whether adding a small amount of mental health resources to such facilities is a better investment than investing them in a more hospitable organizational context.

An additional problem is that clinical staff are subject to the enthusiasms of administrators and YOPB board members who have no training in mental health. The "inner child" focused services, which were originally pushed from outside, are offered in many facilities despite their being no evidence of their effectiveness. At one facility, the "Heartmath program" was being put forward, again without evidence of effectiveness in the population. Other imposed programs include "gang awareness" and "victim awareness". Whether any one of these or the other services is effective in some cases is not known and is not, in any case, the point. Rather, the point is that the process through which mental health programs in the system take on new tasks assigned by those without a mental health background and supported by no empirical evidence. This problem relates to the "conflict of organizational cultures" mentioned above, in that mental health within the system is not strong enough to assert a different approach to deciding which treatments to use.

Special Programs (SCP's and ITP's)
These programs can usually be distinguished on the basis of their staffing patterns and intent to address specific deficiencies in wards, which are defined on a criminological and sometimes psychiatric basis. Assignment to these

programs can be made by request of staff, fiat through the judiciary and probation system and by medical diagnosis. Program failure – i.e., the lack of cooperation with staff; or bipolar manic illness; or having sold drugs with or without dependency; or casual sexual encounters while incarcerated all can lead one into one of these programs. It is therefore expected that we would encounter a wide range of individuals, with a wide range of mental health needs, probably not all that distinct from individuals in the general population. Can these programs differentiate themselves while dealing with such a psychiatrically mixed population? Probably not.

The Karl Holton facility, despite all its positive mental health features, is of course still predominantly a correctional facility, and criminal justice-related values and culture are present there as they must be in all CYA facilities. However, because it is dedicated to treatment, and of a specific population, its culture differs from the other facilities. That is, while most facilities "feel like" correctional facilities with some limited mental health backup, Holton feels more like a mental health facility with correctional backup. Throughout the staff, from administration through teachers, clinicians and other personnel, therapeutic values are more strongly in evidence, which facilities the functioning and morale of mental health staff and in our opinion, the effectiveness of the program.

The Substance Abuse Treatment Programs are as widespread as they are varied in treatment philosophy and structure. Karl Holton Youth Correctional Drug and Alcohol Treatment Facility is unique in that it is specifically designed as a substance abuse treatment facility. Youth Authority substance abuse treatment programs include federally-funded residential substance abuse treatment programs (RSATs), non-federally subsidized formalized substance abuse treatment programs, and finally, informal psychoeducational substance abuse programs. While Karl Holton uses the Hazelton 12-Step Model, the other facilities operate their respective programs independently, using any one of several treatment modalities – some entirely original. Currently, there are approximately 1300 operational substance abuse treatment beds at 100% capacity, representing 20% of the total number of authorized beds statewide. The average length of treatment in a substance abuse program is eight months.

There are currently two formal sex offender programs: the Humboldt Sex Offender Program, located at O.H. Close, and the Carter Sex Offender Program, based at Fred C. Nelles. According to Population Management, there are approximately 1100 identified sex offenders in the system for a total of 229 beds (3.5% of total authorized beds; included in ITP/SCP beds). Priority for the 229 beds is given to wards falling under the guidelines established under WIC 727.6, which mandates treatment be provided for those wards. The approximate length of stay is 19 months.

True specialization of treatment in the medical sense and treatment assignment by medical clinical need is uncommon. One striking feature of the CYA mental health system is that treatment is far less specialized than it would appear on paper, for two reasons. First, wards are sorted into treatment programs (e.g., sexual offender versus substance abuse) for a variety of reasons extraneous to their clinical problems, such as available space, available staffing, the amount of time left on the wards' sentence, and variations in GAF scores that are within the measure's margin of error. So, for example, there are many wards with substance abuse problems in programs of all types, and indeed in the interview 87% of programs reported accepting such wards into their programs. Similarly, whether or not a ward in need of psychiatric medication receives it appears to have less to do with the diagnosis than it does staff availability, particularly of psychiatrists. On the site visits, it was not always clear from a clinical perspective why particular wards were in the programs they were in, and why other wards with similar problems were not in any specialized program at all.

Second, treatment programs are actually more similar in what they do than their names would suggest. Irrespective of focus, almost all rely on group therapy, the content of which may not vary much from program to program. For example, the average substance abuse program reported providing psychotherapy specifically focused on substance abuse to an average of 75% of its wards, virtually identical to the proportion reported by ITPs (77%) and sex offender (72%) programs. Likewise, regardless of focus, programs provide very little in other areas, for example specialty services for learned disabled/developmentally disabled (LD/DD) wards. To this must be added the point that wards in different programs may be mandated to receive some similar services (e.g., victim and gang awareness).

In summary, although the physical settings differed between ITPs, SCPs, substance abuse treatment, and sexual offender programs, the content of treatment and the patients differed less than what was intended and expected in

designing them. This is an outcome of a combination of factors: assignment non-related to clinical need, lack of standardization of medical treatment, and pressures from criminological necessities probably all play a role.

Movement between programs.
One obvious problem is that continuity of care is lacking. Continuity of care refers to a link between the clinical findings of the screen to clinical intensive assessment, to treatment planning together with parole, to participation of clinical staff in conferences and decisions about level of care, to re-assessment when programs are done, to exit-planning and reintegration into the community. Unfortunately, such continuity is generally lacking in CYA programs. Each one of these steps is compromised by the absence of treatment plans, staffing shortages, and lack of clinical supervision. Continuity of care is a hallmark of successful treatment of serious addictive and psychiatric disorders.

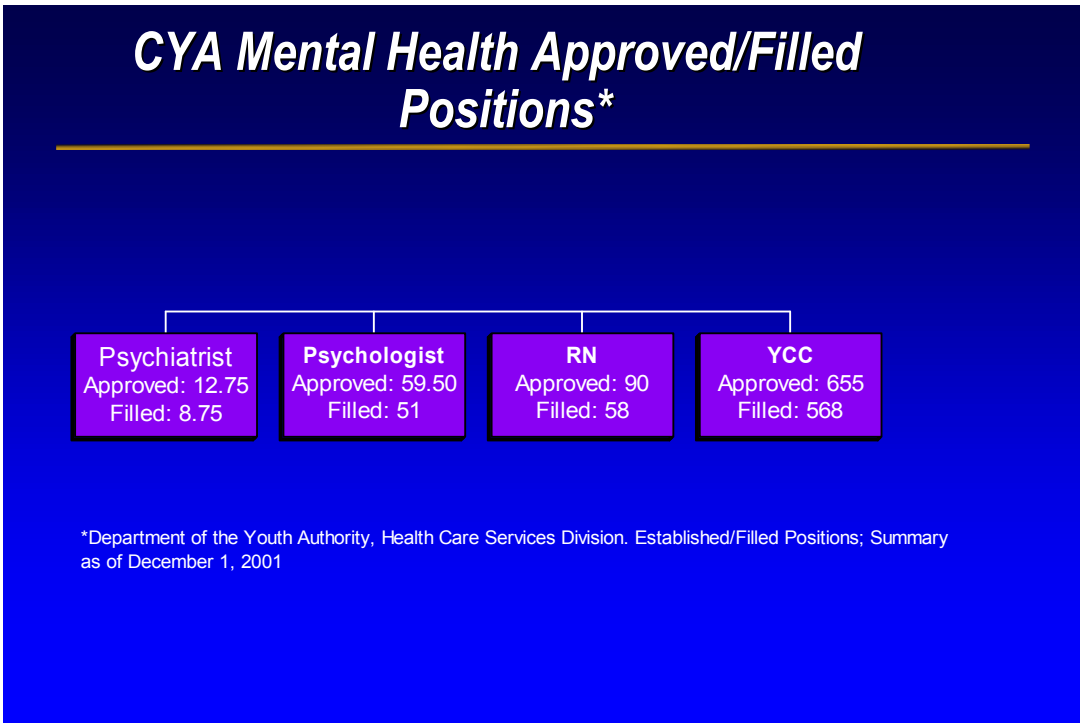
In the interview, only one treatment program reported seeing more than 5% of its wards for aftercare/follow-up services, and 2/3 reported seeing none. Six programs reported that they believed their wards received aftercare elsewhere, but were not able to report where or how often this occurred (if they actually did).

The need for continuity of care extends beyond CYA facilities and into the community, where discharged wards are under the parole system (CYA estimates a current caseload of approximately 4400 wards statewide). Historically, mental health services in the parole system have been extremely underfunded, giving the CYA minimal power to attract high quality mental health contractors at the county level. Psychiatrists in particular have been in even more short supply for parolees than they are for currently incarcerated wards. Fortunately, in last year's budget the state implemented a major increase in funding for parole-based services, which will allow a significant and much-needed expansion of residential and outpatient services for wards. However, implementing programs and contracts with this new funding will take time and careful planning, and commitment of resources from the state may not be of sufficient durability to provide for this start-up period if the state budget situation continues to worsen. Further, regardless of how much funding is provided, the CYA can only contract for services where they exist, and some California counties have minimal mental health services available (see Appendix D for Guideline to developing a parole case supervision system).

B.3.52 Staffing patterns of programs

The staffing patterns in the CYA varied extensively by program and institution (See Figure 14 for a summary), However, all institutions share the common thread of being currently understaffed in mental health care services. (See Tables 10-11 in Appendix F for a detailed look at staffing patterns by institution).

Fig 14.



In examining the existing mental health services and staffing patterns it is good to keep in mind that each institution deals with a distinctive population with varying levels and degrees of mental health issues and behavioral problems. For instance, facilities such as N.A. Chaderjian Youth Correctional Facility or Herman G. Stark Youth Correctional facility, also known as "end-of-the-line institutions," house the most difficult populations of wards who have been transferred from other institutions because of repeated aggressive acts and disruptive behavior. These wards have experienced multiple failures in many other settings, including specialized treatment programs (i.e., ITP, SCP) and are the least amenable to treatment. Paradoxically, some of the wards in these institutions spent time in the Department of Corrections (CDC), thus getting thoroughly entrained in adult prison survival skills, and are subsequently returned to these two facilities to complete their confinement time. Whatever the rationale for this procedure, it has the certainly unintended effect of providing a pipeline for the importation of prison know-how and gang warfare into these two institutions, which greatly complicates if not makes impossible the job of staff serving in them.

The past decade has seen a gradual shift in emphasis toward containment and security away from treatment. Still, we encountered many staff eager to contribute to our study, welcoming the research team with candidness and honesty. However, we immediately became aware of several problems. Below we describe our impressions from our meeting with staff during site visits.

There is a significant resource shortage. It was immediately obvious that the resources CYA has to provide mental health services are not adequate to meet the needs of the wards for whom it is supposed to care. One indication of the demands on the system is that CYA mental health programs reported an overall average bed occupancy rate of 100% over the past 12 months, including one program at 103% and another at 110%. Unsurprisingly, waiting lists are common across programs.

Staffing shortages were ubiquitous, particularly for psychologists and psychiatrists. At the time of interview, only 8 programs (of 33) reported being fully staffed at the level at which they were authorized. The rest of programs reported averaging 89% of authorized staffing. It is the judgment of the consultants however that the number of authorized positions is not sufficient (i.e., even if all authorized positions were filled), so even these figures

understate the problem. For example, the TNA and interview data indicate that the number of wards with serious substance abuse and psychiatric disorders far exceeds the total number of specialty beds in the system, so by extension we know that many of such wards are only receiving general population services which are currently so thinly staffed that they are not adequate to address even less serious psychopathology.

Front-line staff and administrators reported, and the consultants consistently observed, a variety of problems across programs that are traceable in whole or in part to the lack of staffing resources. These include a "crisis mentality" in which staff are racing from emergency to emergency without having time to think through the organization and planning of treatment, minimal or nonexistent clinical supervision, lack of continuing education for staff, poor continuity of care, low morale, and difficulty competing for job candidates with other systems, including the adult CDC. The only positive benefit to the system of the lack of staffing resources is that it does tend to select for unusually dedicated individuals, i.e., those not intrinsically interested in helping wards are likely to leave because the extrinsic rewards are low. For example, at one facility, treatment records indicate that in an understaffed program, staff were nevertheless providing more than mandated amounts of counseling sessions, which had to involve donation of staff's personal time to the wards. Obviously, a system should not rely on such a high degree of altruism as a replacement for adequate resources.

In part, we feel that staffing resource shortages are sometimes created by the role that the YOPB plays in assigning mental health and other programs. External forces drive staff to use time ineffectively. A sad irony of the CYA system is that as limited as staff time is, much of it is spent in unproductive activity, from a treatment point of view. The amount of paperwork, especially board reports, is inordinate. In the interview, the average program director stated that staff spent only 40% of their time actually providing services to wards; much of the rest is spent doing paperwork. It is not clear that all of this paperwork serves much purpose, for example having a significant influence on parole board decisions. In one institution with a lone mental health professional, the demands of yearly board reports completely overwhelmed the capacity of this person to keep up with this demand alone given that hundreds of such reports needed to be generated. Another source of pressure is the generation of reports for W1800's extensions of confinement time, which carry with them the additional burden of testifying in court. The system should consider obtaining these annual and W1800 reports from *ad hoc* consultants, to be funded by a special budget of the YOPB. This might return valuable professional time to clinical needs, such as follow-up screens and medical treatment.

B.3.6. Examination of overlap between diagnostic clusters by interviews and existing programs.

An important question to answer for the purposes of this report is the alignment of psychiatric morbidity and type of program the wards find themselves in, as well as a documentation of the use of medications for the specific treatment of these youngsters in the current system.

B.3.61 CYA Institutions and Psychopathology

Because we know that different campuses within the CYA have different staffing patterns and programs available, it is important to examine the psychiatric status in relationship to placement of a particular ward. Some institutions (like El Paso de Robles Youth Correctional Facility) have minimal resources available, while others are more completely staffed (e.g., O.H. Close and Ventura). Are the wards in the more sparsely staffed institutions less psychiatrically morbid? We have to remember that the current study examines active ongoing psychopathology.

As we can see from Tables 6 and 7, the diagnostic clusters appear somewhat different at different institutions, but in general all disorders can be found at all institutions. This is especially true of Clusters I, II, and V, all of which require active and combined interventions, and is especially notable for boys whose institutions have more varied staffing patterns.

Table 6. CYA institutions and psychopathology.

	N	Comorbidity per Institution: Mean	Standard. Deviation	% of institution with Cluster I	% of institution with Cluster II	% of institution with Cluster III	% of institution with Cluster V
Total	757						
Northern Clinic	12	4.5	2.3	2.0	2.6	1.3	0.5
Southern Clinic	10	4.4	1.8	1.3	2.6	0.7	1.5
Chaderjian	46	4.2	2.1	6.6	8.6	4.6	5.9
Nelles	113	4.0	2.2	**16.1**	**17.2**	11.1	10.3
OH Close	46	3.7	1.5	5.9	5.2	8.5	4.4
Paso	120	3.7	1.8	13.0	14.7	**17.0**	**18.2**
Karl Holton	58	3.9	1.6	6.9	6.9	9.8	12.8
DeWitt Nelson	22	3.9	1.8	2.3	1.7	4.6	4.4
Preston	86	3.7	1.8	10.5	5.2	**17.6**	**12.3**
HG Stark	28	4.0	1.9	2.8	2.6	4.6	4.9
Ventura	172	5.0	2.4	**30.4**	**31.0**	**13.1**	**14.8**

As expected, the Ventura female population appears to be highly psychiatrically morbid across all clusters. Cluster IV, which reflects simple drug abuse and experimentation is the lowest in frequency representing the least morbid grouping. The extra resources in this institution are most likely needed and well used. It should be noted again however, that all clusters can be found in almost all institutions.

Similarly, looking at the distribution of comorbidities across institutions, (see Table 6), we can see that almost all institutions have a substantial number of comorbid wards (average of about 50% with 3-4 diagnoses, regardless of mental health staff present or special programs available).

Looking at the rate with which wards with certain clusters are referred to special programs (Table 7), it is about one third across clusters with the exception of Substance Abuse Disorders (SUD's), where the referral rate is markedly lower. The highest rate is in Cluster II which contains the cognitive/attentionally disordered. This finding is consistent with expectation.

Table 7. Referral rates to specialized programs by cluster

Cluster	**Any known moves to an ITP or SCP. Percent of wards within cluster**
Cluster I	27.0%
Cluster II	37.2%
Cluster III	32.6%
Cluster IV	8.9%
Cluster V	10.1%

As seen from Table 6, active psychopathology is encountered in all institutions in the CYA. The rates of number of diagnoses and comorbidities, as well as ranges of pathology encountered are comparable. There is some differentiation among institutions: Ventura clearly serves more morbid individuals. But overall, morbidities are quite comparable.

The same patterns are evident if the analyses are done by diagnostic clusters. The implication of this finding is that all institutions need a significant mental health presence, as well as a continuum of care. It might be desirable to coordinate that certain institutions specialize in the treatment of certain disorders, but such a specialization would only be advisable once we can be certain that structure and continuity of treatment is optimized.

Medication prescription and diagnostic clusters

Table 8 presents the match between diagnostic clusters and medication prescribed in the system. As the presence of psychiatrists in the system with specialty training in child psychiatry and psychopharmacology is rare, we did not expect that modern psychopharmacology would easily be practiced in this system. A quick review of the available formulary showed that most modern psychopharmacological compounds were readily available in principle. Limitations in prescriptions therefore should not be related to unavailability of sophisticated medicines.

Detailed information for each cluster and medication can be found in Table 8.
Overall, prescription rates for these youths with active psychopathology are 32.1% with a high in anti-depressants and a low in sedatives. Most frequently prescribed are:

1 Antidepressants (mean = 27%)
2 Antipsychotics (mean = 15.2%)
3. Mood stabilizers (mean = 7.9%, range 1-6)

Those medications rarely prescribed are stimulants, sedatives, anti-anxiety and anti-manic agents.
This pattern holds across diagnostic clusters, even those were we only encounter transient disturbances (Cluster III) and no disturbance other than substance abuse (Cluster IV) and dependence (Cluster V).

The highest overall rate of prescriptions is found in Cluster II (48%) followed by Cluster III (43%) and Cluster I (37.3%). Even the substance use clusters show relative common prescription rates.

Table 8. Medication prescription and diagnostic clusters.

Cluster	Psychotropic Rx	Anti Anxiety Rx	Anti-Manic Rx	Anti-Depression Rx	Mood Stabilizers Rx	Anti-Psychotic Rx	Stimulant Rx	Sedative Rx
Cluster 1: Mood Anxiety Borderline ODD N=362	37.3% Range 1-27	2.8%	2.2% Range 1-4	31.8%	8.6% Range 1-6	14.9%	1.7% Range 1-2	0.3% Range 2
Cluster II ADHD Psychosis Cluster A Personality N=109	48.6% Range 1-27	5.5%	1.8% Range 1	43.1%	14.7% Range 1-6	22.0%	4.6% Range 1-2	0.0%
Cluster III Somatoform Eating Adjustment N=40	45.0% Range 1-13	2.5%	2.5% Range 1	37.5%	7.5% Range 1	25.0%	0.0%	0.0%
Cluster IV All wards with **Abuse** who do not fall into Cluster I-Cluster III	13.5% Range 1-12	2.8%	0.0%	10.6%	5.0% Range 1-2	3.5%	0.7% Range 2	0.0%
Cluster V All wards with **Dependence** who do not fall into Cluster I-Cluster III N=193	16.1% Range 1-12	2.6%	0.0%	11.9%	4.1% Range 1-2	3.6%	0.0%	0.0%

Also, examining the percentages of all wards in all clusters on any psychotropic medication, it is clear that despite the fact that these wards are all currently fulfilling diagnostic criteria, only a minority in Clusters I and II – the most likely to require medication – are in fact on it. By contrast, Clusters III and IV, who most likely do not require medication, still have a significant proportion on medication. This could of course mean that they were successfully treated, but it also could mean that they are receiving psychopharmacological treatment unnecessarily. This issue merits continued attention and evaluation.

Across all clusters, we find that antidepressants are most frequently prescribed, regardless of diagnosis, followed by antipsychotics and mood stabilizers. Stimulants, anti-manic and anti-anxiety agents are a distant 4th, 5th and 6th. Encouragingly, sedatives are rarely prescribed. Also notable is the fact that SUDs receive low levels of prescription, however they still receive some without the presence of another diagnosis even. Most concerning is that there is a substantial percentage (22%) of Cluster III wards receiving potent antipsychotics with unclear indication at the present time.

The pattern of prescriptions most likely reflects security and safety considerations and does not map accurately onto existing diagnoses and evidence-based practices in the community. It is also clear that much prescription in the system occurs “off label.” While this may reflect community standards of care, we also need to make sure that appropriate alternatives are considered and found to be necessary.

B.3.62 Conclusions and Limitations

At the present stage of knowledge we have to be somewhat cautious about our inferences from these findings. We are dealing with children in a very special environment, with high severity of disorders, which might lead practitioners to unusual treatment strategies. We also were not yet able to examine pertinent details of the psychopharmacological practices, such as length and dosage of prescriptions, augmentation strategies, polypharmacy and side effects created by the medications, issues of compliance and abuse, etc. These should be addressed in future studies, and should lead us to better understand the special characteristics of psychopharmacological practice in this institutional setting with this especially complex population.

B.3.63 These findings lead us to recommend the following:

1. Treatment plans need to be created with justification for medication use based on current principles of psychopharmacology in youths. When compounds are prescribed "off label," this needs to be justified. Special attention needs to be paid to adequacy and length of treatment, alliance building with the patient and the patient's family.
2. The high rates of youths with active disorders off medication need to be examined. This could reflect refusal to take medicine, problems with side effects, lack of diagnostic acumen, treatment failure, etc. While there seems to be some procedures in place now to handle situations where lack of medication treatment compromises an individual's care (e.g., direct observation therapy). Knowledge of how to implement these procedures in the different institutions varied greatly. This procedure needs to be standardized, strengthened and made widely accessible.
3. Some issues of compliance are inevitable with this population. At the present time, we are not certain that the system would be prepared to deal with these effectively. In order to practice modern psychopharmacology, we would need the strong and consistent presence of a well-educated nursing staff. Many of the functions of supervision and even adjustment of medications could be provided by skilled and properly supervised nurses and nurse practitioners. We encountered such individuals only sporadically throughout the system. We recommend that the nursing pool be strengthened and amplified. Nursing care should be available at all institutions 24 hours a day, seven days a week. Psychiatric backup must be available during the same period. In some institutions, medications were not prescribed, because a psychiatrist was not available. This is completely unacceptable, given our modern understanding of medicine. Not surprisingly, there were a number of non-professional and professional staff who "did not believe" in medication as treatment, or saw it as an "easy way out" or as a "crutch". Such attitudes are unacceptable in the 21st century. As far as they represent private opinions, they may be held and treated as such. As far as they represent institutional professional behavior, they ill-informed at best, and dangerous at worst. They must be dealt with by education and professional development. A strong medical presence will help in this regard.
4. There needs to be a system-wide standard for on call coverage of medical duties. Often, psychologists are called upon to decide on treatment issues which are medical in nature, simply because somebody is ill, unavailable, on vacation or otherwise indisposed. Physicians needs to cover for each other, and should be fairly compensated for such extra duties. A call schedule should be created, published, disseminated and adhered to. A pager system needs to be in place to assure that individuals on call are reachable at all times. Nursing staff needs to be informed about this system and can participate to some extent as is appropriate. A similar on call schedule should be in place for other mental health personnel, covering their responsibilities and duties at all times. Again, such extra activities should be fairly compensated.
5. An effective continuing medical education program needs to be in place in the CYA, addressing the educational needs of all mental health practitioners. This will serve to standardize practices, bring them in line with current medical evidence, and provide cost effective intervention for psychiatric disorders.

Caveats: Prescription practices need to be in line with safety and security considerations. We understand the risks of prescribing certain compounds in this population. However, we see a great need to strengthen the medical component of the CYA to be able to provide adequate care. At any given time, we would expect that about 40-60% of the wards would be on medicine (about 3000 cases). Estimating a 15 min. requirement per ward per week, this would mean about 800 hours per week dedicated to psychopharmacological issues among the nursing staff, and physicians, amounting to at least 20 FTE's required to handle the psychiatric medication issues in this population well. Given that there are currently more than double such FTE's available, it seems at least possible to provide this care, although it is unclear to us what other medical duties are necessary to perform and thus would impinge on this pool of talent. The problems we encountered, however, were lack of interest and sophistication, appropriate supervision, and adequate leadership. The CYA should consider assigning at least one nurse practitioner per campus with special expertise in this area who could provide such sophistication and leadership under appropriate medical-psychiatric supervision.

B3.7 Survey of current psychiatric treatment satisfaction levels (see Appendix C)

A third important part of assessing the mental health system of the CYA is obtaining opinions from the wards themselves. The most efficient, confidential, and practical method of accomplishing this was having the wards complete a brief questionnaire about the mental health services they utilized and their satisfaction with the services. A survey was designed based on the Client Satisfaction Questionnaire-8 item developed by Attkisson and his colleagues (1990). In this section, we present the results from the survey. The project team believes that it is important to represent the perspectives of wards in designing mental health systems.

The sample population consisted of 273 wards, 185 of whom could be matched up with TNA data. The remaining 88 wards were either in an SCP or ITP. Active consent was obtained (see Appendix C). Approximately twenty wards refused to participate due to scheduling conflicts (i.e., school or work-related). The data was collected at several CYA institutions by CYA staff and sent to us as archival data.

The first question concerned whether wards were aware that the YA had mental health services available to them. The overwhelming majority (92%) was aware of services. The next question asked who the wards would talk to if they had a personal problem. A list of possible persons was included (see Table 9). As shown in Table 7, 69% wards would seek help from their YCC or caseload counselor, 47% from a psychologist or psychiatrist, and 60% would also speak to their friends. When asked who they would go to *first* with a problem (excluding their friends), 35% of wards indicated their YCC or caseload counselor. Twenty-seven percent would first go to a family member and another 9% would see their chaplain. Only 7% of wards indicated they would first go to a psychologist or psychiatrist, and 4% indicated "no one."

Table 9.

If you had a personal problem, such as drugs, family or sex-related, who would you talk to?		**Who would you talk to *first*?**
YCC or Caseload	69%	35%
Senior YCC	31%	
Unit/Lodge Parole Agent	32%	
Teacher	16%	
Caseworker	29%	
Psychologist/Psychiatrist	47%	7%
School Psychologist	18%	
Chaplain	33%	9%
Security Staff	14%	
Foster Grandparents	11%	
Volunteers	17%	
Friends	60%	
Other: myself family spouse/girlfriend nurse superintendent God/Christ group home staff no one other	50% 1% 82% 7% 2% 1% 2% 1% 2% 4%	27% 4%

Thus, there is a high level awareness of services in the system. Wards report YCCs and friends as the key people in their lives, whereas mental health personnel are not far behind.

Next, wards were asked if they received help with a personal problem. Nearly three-quarters (74%) answered positively. Of the wards who did receive help, 46% were satisfied with the help compared to 7% who were not (37% were "somewhat" satisfied and 10% were "not much"). These proportions are lower than what is typical in studies of community-based services, which may reflect the character of CYA wards, services, or both.

The final section of the CSS concerned the types of programs wards had received while at the YA. Twenty-eight percent had been in an intensive treatment program and 29% had been in a specialized counseling program. When asked if they had counseling from a psychologist or a psychiatrist, 46% and 49%, respectively said that they had. In

regard to frequency of counseling, 60% indicated 0-1 times a week, 29% 2-4 times a week, 4% 5-7 times a week, and 4% 8-10 times a week. And, lastly, wards were asked if they thought the counseling helped: 26% "a great deal," 56% "somewhat," 12% "didn't help," and 4% "made things worse."

Thus, satisfaction with help received is acceptable, albeit not maximal.

B.3.71 Matching Up Surveys with Needs

Finally, we were interested in determining whether wards received help and whether their satisfaction level was related to their mental health problems. Since The Steiner Laboratory already possesses diagnostic and demographic data on these individuals in the TNA study, we were able to determine whether satisfaction with CYA mental health services changes as a function of those variables (e.g., do wards with substance abuse disorders feel more satisfied with CYA services than do those with affective disorders).

Correlations were computed between the questions "Did you have help with your personal problem?" and "If so, were you satisfied with the help you received?" and GAF scores and number of diagnoses within the a-priori clusters. No significant correlations emerged (rs $\leq .10$, ps $\leq .28$), suggesting that the presence and level of satisfaction with help was not influenced by the presence and frequency of mental health problems.

We also examined the relations between comorbidity and inclusion in an intensive treatment (ITP) or specialized counseling program (SCP). As can be seen in Table 10, the majority of wards who have problems in any of the clusters have never been (or do not know if they have been) in an ITP or an SCP. Of wards who meet the criteria for two or more clusters, approximately three-fourths have never been in an ITP and two-thirds have never been in a SCP.

However, the picture does improve somewhat when we examine rates of seeing a psychologist, a psychiatrist or some other staff member. Still, less than one-half of wards who have a problem with depression and/or anxiety (Cluster I), for example, have ever seen a psychologist or a psychiatrist, although 67% have received counseling from other staff. It is also interesting to note the numbers of wards (5-8%) who have received different types of counseling but who do not meet the criteria for any of the four clusters. And, lastly, Table 11 displays the percentages of wards by cluster separated by their opinion of how much they think counseling helped. There was no discernable difference by cluster membership. Rates of helpfulness mimicked the overall level of satisfaction.

Table 10.
Percentages of wards by cluster who have experienced different forms of treatment

	No Clusters	Cluster I	Cluster II	Cluster III	Cluster IV
ITP	8%	19%	29%	25%	5%
SCP	7%	20%	38%	25%	10%
Psychiatrist	5%	43%	53%	38%	29%
Psychologist	6%	45%	53%	38%	26%
Other Staff	6%	67%	68%	50%	78%

Table 11.
Percentages of wards by cluster and the degree to which counseling helped

	No Clusters	Cluster I	Cluster II	Cluster III	Cluster IV
A great deal	22%	26%	18%	25%	16%
Somewhat	44%	56%	52%	50%	67%
Didn't help	22%	12%	18%	25%	16%
Made things worse	11%	7%	12%	0%	2%

B.3.72 Conclusions regarding Objective 3

Whether we look at the issue of how programs are matched with need, regardless of whether we look by

- Site visit impression;
- Correlations between established diagnoses and programs;
- Staffing patterns in different institution;
- Satisfaction level of the wards with care received;
- Medications received

All results converge to support similar conclusions:

1. The relationship between mental health treatment and active psychiatric diagnosis is much less firm than it should be, given recent advances in our understanding of the best practices available for the treatment of these children. This is particularly evident in the use of medications for the treatment of disorder. But it is also evident in the institutional assignment of individuals in the system. We think the origin of this misalignment is multi-faceted:

a. Nomenclature blurs lines between criminological and medical/psychological interventions and creates impression that they are interchangeable. We advocate a separation of criminalogical management and rehabilitation which is driven by security and safety concerns, and holding the individual accountable; from medical treatment which is determined by clinical decision. These two streams of intervention need to be coordinated and are sometimes complementary, but should not be regarded as interchangeable.
b. At the same time, the system has clearly switched into a "safety first" mode which is applied indiscriminately across all individuals and all locations. Such an emphasis is not always justified, and there will be some cases where mental health treatment needs will dictate management within the institutions.
c. The existing mental health system is fragmented, not unified. It does not offer career trajectories to its practitioners. It deselects competent and energetic individuals by nature of the marginal compensation and isolation in the system.
d. Lack of resources creates holes in service structure problems.
e. Isolation of mental health practitioners in the system from the management teams (school, criminological) deprives them of invaluable input to be received and output to give back to the team. The same isolation also makes coverage complicated if not impossible.
f. Education and training of mental health practitioners in the system is limited and thus, in combination with isolation leads to idiosyncratic and outdated practices.
g. YOPB demands on the system are random and create pressures and demands that interfere with appropriate care.

2. Screening information, clinical diagnosis, treatment plan, assignment to special programs and continuity of care in the broadest sense are extremely uneven between institutions, despite the fact that most institutions serve very similar individuals.

3. While bed supply and presence of putative special and intensive programs might be sufficient to meet existing needs, staffing of these facilities and the expertise of individuals running these programs is of uneven quality, requiring more rigorous education and supervisory efforts. We expect a resolution to come from a re-composition of the mental health team components, a more central assignment of their roles in the criminological management and psychiatric treatment process, and a sophisticated coordination of the multilevel interventions need.

4. The problematic allocation of resources derives largely from the lack of a modern vision on how to integrate mental health in the care of delinquent children.

5. In the final section of this report we will address all these concerns and propose solutions for them based on our available information.

B.3.73 Limitations

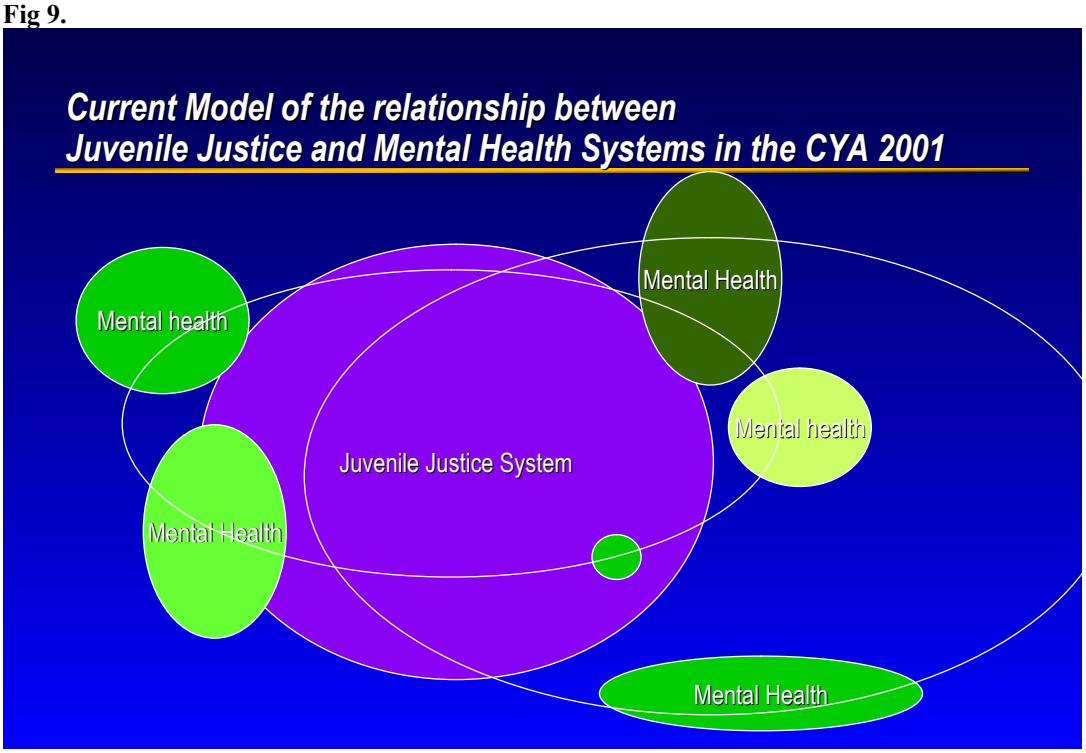
Several limitations of this study should be kept in mind. First, studies of sites were not comprehensive; we visited all eleven institutions but contacted only some personnel within each program. Second, site visits were time limited, and thus, detailed information could only be garnered from a limited number of personnel of each program. Some information was provided by the central office of the CYA, due to time constraints: e.g., beds were not directly counted, medical records were not directly examined, information from a previous study was used to come up with current descriptors. Satisfaction information was drawn from only a small percentage of the total population, and measured only once. Finally, only one self-report questionnaire was used to measure satisfaction. Many of these limitations were produced by a tight time schedule, and an effort to keep cost to a minimum.

B.4. Suggested improvement of mental health services in the CYA:

B.4.1 A change in vision: Creating a Coordinated Continuum of Criminological and Mental Health Interventions (CCCMHI)

Currently, the mental health services across the CYA are at best characterized as adjunctive to juvenile justice and criminological rehabilitation and management; and at worst, isolated and even irrelevant. The model is much like a solar system where a star (Juvenile Justice) is encircled by a very diverse array of planets (see Figure 9 below).

Fig 9.



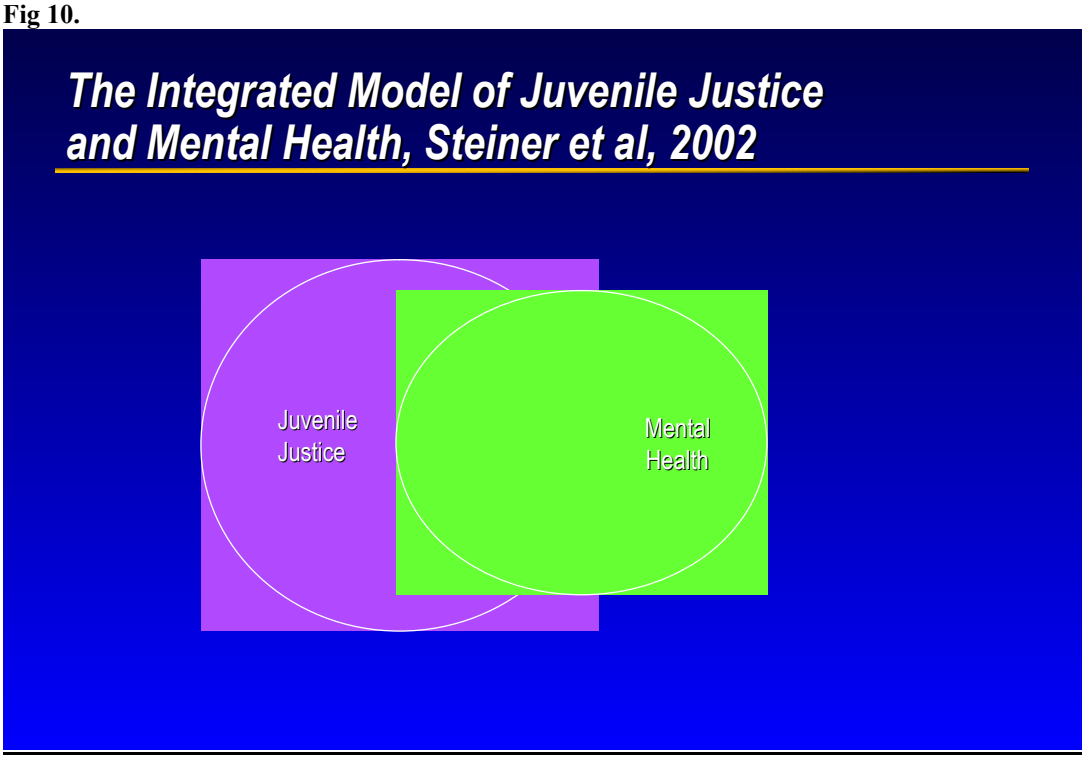
We suggest that on the basis of our findings, we need to change this basic alignment to reflect more accurately the existing medical needs in this population. Mental health services need to be an integral part of the ongoing criminological management of these wards. Depending on the severity and pervasiveness of disorders, mental health needs to play an increasingly prominent role with certain wards to the point of becoming the controlling influence in the management if severity or extensiveness of disorder warrants this.

To this end, we propose the following:

a. that general population management be considered equivalent to intensive outpatient care,
b. SCP programs be considered day treatment
c. ITPs be considered intensive residential facilities.
d. SBTP be considered equivalent to locked inpatient units
e. Staffing should be uniform across campuses and institutions for these settings, informed by best practices.
f. These treatment settings should be distributed across the state such that they deliver comparable services to youths in the northern and southern part of the state, thus enabling youths to be treated in as close proximity to their social environments as possible. Such proximity would facilitate the establishment of continua of care and preparatory programs and family contacts for exit.
g. At the same time, we advocate for a certain degree of specialization in different institutions along the lines suggested by our diagnostic clusters to facilitate more expert delivery of targeted services, staff development and ward recovery.
h. We also suggest that settings be created which are prepared to handle those wards who are not psychiatrically impaired yet present severe management problems. These settings should be separate from the treatment settings we have described and be primarily criminologically-informed by their management approach. Mental health services should only be provided on a consultation basis in these special settings.

The implementation of these recommendations would lead to an integrated model along the lines below

Fig 10.



Juvenile Justice and Mental Health overlap to a considerable, although not complete degree. Juvenile Justice and its interventions very much form the basis and backbone of the needed interventions for these youths. The system provides the necessary limits and boundaries of personal freedom, while appealing to personal responsibility. Mental Health provides the necessary procedures to restore youths to a level of functioning where they will maximally benefit from juvenile justice interventions. At all times there is a mutual commitment to examine conjointly the most prudent and efficacious pathway to intervene in a given case. Periodically, such a plan for intervention is examined and updated in the light of new information regarding the progress of the youth.

B.4.2 General comments and principles informing the recommendations

Despite the fact that our knowledge base is by no means complete, we are able to distill several salient treatment principles that have promise for success (Steiner & AACAP, 1997). The nature and degree of psychopathology which associates with delinquency calls for several program characteristics which need to be implemented to increase our chances of success.

a. Aiming for continua of care

We expect that ultimately, a continuum of care model will provide the best vehicle for delivering state of the art interventions. While morbidity is high, we expect that extensive rather than intensive intervention will be the basic model to address most of these problems. Finally, we expect that most children will require multi-modal, carefully coordinated intervention, targeting multiple deficient domains**.** The main principle governing treatment will be that the ward be allowed to function in the least possible restrictive environment that can ensure safety and personal growth.

b. Because juvenile delinquents are a highly heterogeneous group, with differing needs and levels of accompanying psychopathology, it is unrealistic to expect that any one intervention or even any one program will be equally effective for all members of such a diverse population. Great care must therefore be taken to profile the youths and address their multiple problems and match interventions to the primary problem. Primacy of problem in a highly comorbid picture can be difficult to establish, but an investigation along developmental principles is usually helpful (Steiner & Hayward, 2001). If a condition precedes another in time, it is reasonable to assume that there is a causal connection between them. If a youth is depressed at age 9, substance abusing at age 12 and conduct disordered at age 14, it would then indicate his depression as the pathogenetic center for his condition. His antisocial behavior should respond to treatment of his mood and substance problems.

c. There is little room for complacency or therapeutic nihilism. The general message of recent investigations of program efficacy has been most succinctly stated by Loeber and Farrington in a recent summary of the accumulated wisdom of an expert panel on the issue: It is never too early and it is never too late (Loeber & Farrington, in press). Early intervention is effective and prevention is preferable to treatment if at all possible. It has a higher chance of success when fewer risks have accumulated (GAP, in press; Mrazek, & Haggerty, 1994). Conversely, it is also important to continue interventions throughout adolescence, because there is accumulating evidence that this approach can also be effective (Borduin et al., 1995).

d. Multiple treatment targets should be selected, as most of these youths are deficient in many domains of functioning. Their deficits compound each other: problems with learning lead to lack of academic success, assortative mating and social isolation. Combination treatment packages consisting of evidence based psychosocial and psychopharmacological packages will be needed to address the needs of these severely compromised wards.

e. Most experts agree that there is little chance that isolated single interventions will be effective against all forms of delinquency. Interventions need to be multi-modal, they need to be applied over sufficient lengths of time (i.e., over the course of months, not weeks). As much as is possible, they need to be delivered in settings which retain the child in their social context to which they will return.

f. Simple inoculation approaches and interventions based on single-event hypotheses are not going to be successful. Examples would be boot camps, wilderness programs, and shock incarceration (Grizenko, Papineau, & Sayegh, 1993; Mulvey, Arthur, & Reppucci, 1993; Sholevar, 1995). All of them, whether they are biologically or psychosocially based, are at best ineffective and at worst injurious, especially when used in isolation (Cowles, Castellano, & Gransky, 1995; Kazdin, 1992; Mendel, 1995).

g. Services within the CYA need to reflect these principles. Services should effectively combine criminological management, and psychosocial and psychopharmacological interventions. Past studies investigating the effectiveness of mental health services have recognized the importance of providing a highly structured treatment setting (Lipsey, 1992), as well as provision of a safe, predictable, congruent, and stable treatment environment (Moos, 1973; Steiner, Marx, & Walton, 1991). A "one-size-fits-all" model is clearly inappropriate when treating juvenile delinquency. Interventions helpful for some juveniles can indeed prove detrimental for others (Steiner & Dunne, 1997). Conduct disorder, delinquency, and antisocial behavior patterns represent complex developmental outcomes that change over time in any given individual, and therefore, successful programs must not only accurately profile youth at entry into treatment (Steiner & Cauffman, 1998), but also conduct ongoing reevaluations of individual treatment needs (Soler, 1996). Program impact appears to be maximized by providing "multiple services in a continuum of care" (Steiner & Cauffman, 1998). Studies in the 1970s illustrated the importance the social environments of psychiatric and corrections programs have on determining treatment outcome (Ellsworth, Maroney, Klett, et al., 1971; Moos, 1974). For example, such characteristics as the type of interaction between staff and clients, the degree to which staff are concerned with the personal and practical problems affecting clients, the extent to which program processes are structured, and the clarity with which program goals, rules and processes are stated have been shown to be important to treatment outcome (Moos, 1974). Programs in which staff function at high levels are more involving, supportive and autonomous and place more emphasis on personal problems, practical skills, and organization (Johnson, 1981; O'Driscoll & Evans, 1988).

Bromet, Moos, and Bliss (1976) have shown that in addition to the actual functioning of the program and treatment experience, the client's perceptions of the treatment environment can be a strong predictor of outcome. In

addition, the extent of agreement between staff and clients on perceptions of treatment may be an important factor in effective program operation (Moos & Otto, 1972). Recently, Steiner, Hernandez, Peterson, and Stocks (2001) surveyed residents and staff (residential and administrative) of a statewide non-profit organization offering an extended care system of residential treatment for juvenile offenders, as well as for other juveniles falling under the jurisdiction of the courts on their perceptions of treatment efficacy. They found that the level of agreement between the residents and residential staff on treatment services showed moderate strength. More impressively, the coherence between residential and administrative staff was quite strong. While the degree of emphasis differed, all three groups demonstrated strong agreement in determining which areas of the program environment are emphasized and which are de-emphasized. Research supports that agreement between staff and residents may be an important factor in effective program operation, and therefore, treatment outcome (Moos & Otto, 1972).

B.4.3 Specific recommendations regarding staffing and bed requirements.

In considering needs and required staffing, we can proceed from two different directions:

a. we take existing population characteristics and map needed programs onto them.
b. we take as a point of departure the existing beds, consider their programmatic function in the continuum of care and calculate staffing needs based on programs to be run in these settings

Both approaches should be complementary and arrive at similar profiles of needed staffing. After explaining our general assumptions, we will make recommendations according to these two alternate paths.

B.4.31. Assumptions for the following analyses:

The specific staffing and bed requirements we are suggesting below are based on the following assumptions, which are driven by a review of psychiatric and psychological practice guidelines, empirical and meta-analytic studies of treatment efficacy, and clinical experience within and outside the CYA system. These recommendations are most likely a first approximation and must be regarded as preliminary. They will need to be evaluated serially for efficacy and necessity.

As a general principle, we suggest that we would be best advised to treat the most prevalent problems which have evidence-based, tested treatments available, and which have a very high chance of producing positive outcomes in terms of mental health as well as criminal recidivism. Diagnoses in Clusters I, II and V would fulfill these criteria. There are special safety concerns which make Cluster II diagnoses somewhat more difficult to tackle. Programs and staffing should reflect the needs of wards with these diagnoses. We recognize that many difficult problems occur in this population, but some of them are infrequent, even rare, albeit extremely troublesome. Such problems should be probably handled by contracted arrangements.

We think that such contracted arrangements can and should be made with other state entities, such as the Department of Mental Health. They would seem to be the prime candidates to provide much needed medical psychiatric intensive services to selected wards. This responsibility strikes us all-the-more as natural, as most of these cases will most likely represent the treatment failures of the community mental health system and the absent state hospital system. To saddle the juvenile correctional system with the care of the indigent underidentified, underserved, and undertreated mentally ill is tantamount to the criminalization of the mentally ill and not advised.

Assumptions:

1. We extrapolated from the percentages of cases in each cluster in our study to the number of cases in the total CYA population, based on the total and keeping the genders separate, as the frequencies are significantly different. The main table reports on the whole sample, but more detail by gender can be found in Appendix F. Another caveat that applies is that the age in our study sample is lower than is found in the total CYA population: This is because our study looked only at wards coming into the

system, and although there were some older than 19, there were only very few, not enough to examine separately. Our current estimates generalize from our study sample (N=790) to the population (6453), but we know that approximately 20% in fact are older than our study sample. This might matter, as impressionistically we would say that older wards tend to be less psychiatrically morbid, albeit more criminologically sophisticated and troublesome to manage. The net effect of using the entire number of wards as a reference group might be a slight overestimate of psychiatric morbidity, but at this point we cannot be certain of that.

2. All wards with Conduct Disorder or Oppositional Defiant Disorder (CD/ODD) (% - numbers) will be assigned a case manager. That person will handle up to 20 cases at any given time. This person (non-posted Youth Correctional Counselor/Parole Agent or master's level sworn or non-sworn staff) will have some background in counseling or psychology, at the B.A. or maybe Master's level. They will receive special schooling in well-established treatment techniques for CD addressing compliance, anger management, and limit setting. They will also be the hub of treatment, essentially functioning *in loco parentis*, while preparing the family and ward for transitioning into the community.

3. Wards with Cluster I diagnoses will receive Cognitive Behavioral Therapy (CBT), medications and in some percentage (to be discussed below) higher level of intervention and treatment (SCP, ITP). The CBT packages will be delivered by M.A./Ph.D. level psychologists in groups of 8 on a weekly basis for 6 months. The assumption is that a 1.0 FTE psychologist will be able to provide 30 hours of direct care, half of which will be in a group format. The other half will be individual interventions necessary for those wards who cannot complete a group based intervention package. In addition, the wards will receive a 12-month course of medication, delivered by a psychiatrist who is allotted 30 minutes per week for three months, and subsequently 30 minutes per month per ward. As with the psychologist, we expect a 1.0 FTE psychiatrist to carry 30 direct hours of patient care per week, i.e., on the average 60 cases. If there are administrative and medical direction duties required, these will be incremental to the clinical activities, separately calculated and compensated. As a rule of thumb, we would expect that about 15% of the total pool of MD and PHD FTE 's will be needed to provide these duties.

4. Wards solely with Cluster II diagnoses (1.5%) we are assuming will be on medication for the duration of their stay at the CYA (24 months average). In addition, they will receive case management and a 6 month, once a week supportive psychosocial treatment intervention, once a week in groups of 8;

5. We are assuming that wards solely with Cluster III diagnoses (1.5%) will not receive ongoing care other than case management and tracking, perhaps serial evaluations by a psychologist (about 6 hours per year).

6. We are assuming that Cluster IV (substance abuse without any other diagnoses) will participate in an informal substance abuse program. In this program, which can be run by their case managers, they will be tracked for merging mental health issues

7. We are assuming that wards with Cluster V diagnoses (substance dependence without any other diagnoses) will be in a formal substance abuse program, which functions as a full-fledged mental health program. In this program, they will remain for 12 months, with weekly group contacts with a psychologist, in groups of 8 per session. They also will tracked by a psychiatrist for medication needs. This will be for 6 hours over the course of a year.

8. ITPs: wards will be treated in these settings for periods averaging 3 months (range 1-4) to be returned to lower levels of care as soon as possible, after clinical stabilization. Psychotic individuals, suicidal wards and wards with extremely complex comorbidities – i.e., between 6 and more diagnoses) should be found in this setting.

9. More extensive services will be provided by SCPs after a good and appropriate treatment plan has been worked out in the ITP. The average length of stay in the SCPs will be about 12 months.

10. We are suggesting to form mental health teams which consist of case managers, psychologists and a psychiatrist, who will have different role assignments. Coordination of care and criminological management will be of the essence and will be achieved by daily, weekly and monthly rounds and updating of treatment plans,

depending on whether the ward is in an ITP, SCP or GPOP program. The case manager will be constant and responsible for the seamless integration of care across the continuum of care the ward needs during his/her stay.

11. We are assuming that such a reorganization and revitalization of the mental health staff in these programs will result in unanticipated benefits and augmentation of resources which one cannot predict on the basis of staffing ratios. So, for instance, we anticipate that the increased involvement of peers in group treatment will lead to spin off effects as are common for instance in substance abuse treatment, leading to overall improvement of care and functioning.

B.4.32a Recommendations regarding needed beds on the basis of population characteristics.

Table 12 illustrates the projected bed needs in the current CYA population based on our calculations, which extrapolate bed needs from known psychiatric population characteristics. In order to simplify these analyses further, we are grouping together our diagnostic clusters to form three distinct groups:

1. A group of clusters in need of the full range of services (in Red) (Includes Cluster I, II, and the substance dependent wards): We then calculate the actual number of exclusive cases found in our research TNA sample, express them as percent of total TNA sample and use that percent to predict total anticipated cases from the total of CYA wards (6580). We then proceed to the second half of that graph, in which we estimate the needs of ITP, SCP and GPOP services needed for this particular group. We arrive at that estimation by applying the percentages listed below the number of cases to the total number of cases in each group. Thus we arrive at the estimate that the red first group will require in any given year. The formulas applied to the other groups follow that same logic.
2. A group of clusters in need of assessment and tracking (green) (Includes diagnostic Clusters III and IV): We anticipate that a smaller percentage will be using intensive services.
3. A group of clusters with either no psychiatric disorder, conduct disorder or related personality disturbances only (CD, APD, Narcissistic and no diagnoses) not in need of mental health services beyond case management. We still estimate that a small percent will require some intensive services.

We then total these cases, resulting in the following distributions: 837 ITP cases; 1082 SCP cases and 4663 GPOP cases per year. We are then further calculating the actual beds needed per year in the CYA system, taking into account the Average Length Of Stay (ALOS) in each one of the service components, resulting in the final estimates of beds in the CYA: 209 ITP beds, 1709 SCP beds, and 4663 GPOP beds.

Thus, we conclude, that the current structure of beds in the CYA system reasonably reflects what we expect the configuration to look like, provided that modern medical case management is brought to bear on the situation, especially providing intensive and restrictive services only when needed, and for the most efficacious use of time.

These estimates are limited by two considerations: we do not know the exact mental health profile of the 30 % older population – we think it might be less, but we cannot be certain. We aggregate girls and boys for this analysis, although we know the need for girls to be greater. As a rule of thumb, we would say that girls would need incremental services by a factor of six.

This continuum of care model assumes that ALOS in the ITP will be 3 months, and twelve months in any of the other beds. As the other services are asked to absorb a steady case flow from the other components, it is of the essence that adequate mental health staffing is provided in all components, providing a layering of professional expertise and carefully orchestrated effort. This leads us to a consideration of staffing patterns in the system, based on the estimated configuration.

Table 12. Bed needs calculated on the basis of population characteristics

Diagnoses		Reference N	TNA sample N = 790	% of TNA		Total CYA N = 6580			
						Extrapolated cases from TNA %			
Cluster I	can be comorbid		400	0.51		3332			
Cluster II	Only		12	0.02		100			
Cluster III	Only		12	0.02		100			
Cluster IV	Only		74	0.09		616			
Cluster V	Only		219	0.28		1824			
CD only			60	0.08		500			
No diagnosis			13	0.02		108			
Total cases			790			6580			
						Cases in each group needing services			
Clinical Group		Service needed			Numbers and %	Total cases	ITP *****	SCP	GPOP
Clusters I, II, and V (Red):		in need of full MH service continuum			Actual cases per year	5256	788	1051	3416
Consisting of:		ITP, SCP, weekly outpatient services			% of group in particular service		15%	20%	65%
Cluster III and IV (Green)		need assessment and tracking			Actual cases per year	716	36	18	662
Consisting of:		initial assessment and monthly services			% of group in particular service		5%	3%	
CD only and No diagnosis (Blue)		case management and tracking			Actual cases per year	608	12	12	584
Consisting of:		YCC contacts and tracking			% of group in particular service		2%	2%	
						6580	**837**	**1082**	**4663**
Bed Needs (ALOS taken into account)						**6580**	**209**	**1709**	**4663**
Percent of Total beds							**0.045**	**0.26**	**0.71**
ITP****	ITP bed occupancy will be 3 months average and								
	Then move to a SCP, resulting in an additional 627 cases referred to SCP's per year.								
	SCP and GPOP beds one-year projection								

B.4.32b Recommendations regarding needed staff on the basis of projected bed needs.

As in our previous analyses, we are making certain assumptions. We assume that different services will need different staffing densities to reflect their more or less intensive nature. We assume that for a fulltime clinician, 30 direct contact hours per week are budgeted (translating into 1800 minutes. The rest of their time (600 minutes) will be spent in activities related to the clinical care paperwork, phone calls, letters, communication with staff). If there are additional duties to be performed by professionals, such as professional development, testifying, participating in rounds, covering for others, medical direction, programmatic leadership, such will be considered incremental to their clinical time. Actual clinical time with wards may be spent in groups or individually, or with them and their families. We would guess that groups would not be bigger than 8 persons per group. We anticipate that there will be rounding on all wards at different frequencies: 3-5 times a week in ITP's, 1-3 times a week in SCP's and monthly in GPOP settings.

We assume that there would be mechanisms tracking staff productivity on a monthly basis, feedback given to individuals and expectations clearly communicated. As the system improves the salaries and retention packages of staff, we would anticipate greater expectations for excellence and adherence to the highest of professional standards.

Table 13 utilizes the bed/case rates established above to calculate the needed FTE's of professional staff to carry out all clinical functions. Describing the type of bed, we calculate sequentially the needed Psychiatrist, Psychologist and masters level therapist time to provide interventions in ITP, SCP and GPOP type settings

Table 13 ends up by summarizing additional FTEs required to make this model work. The only uncertainty is regarding the addition of masters level individuals. We are told that they do exist in the system, but currently do not fulfill the functions we would expect of them. Thus, the number of additions may be considerably lower than shown.

We also show the summary of mental health professional time per ward per week. We have averaged that across all individuals in the system, recognizing that most likely time would only be spent on those in need. Nevertheless, we wish to point out that our new model, the COORDINATED CONTINUUM OF CRIMINOLOGICAL AND MENTAL HEALTH INTERVENTIONS (CCCMHC), supplies considerably more resources to lower level of care than are currently available. It is this re-allocation which will make this continuum of care model work.

Comparing these recommendations with what is currently available in the CYA, we see that these needs are incremental to existing positions, but not exorbitantly so, supporting our original contention that maximization of existing resources is a necessary first step in achieving improvement in the system.

Table 13. Professional staffing needed for beds as suggested by CYA population characteristics.

Based on cases per FTE professional time

Assuming 1800 minutes direct patient contact per work week per FTE

Actual minutes may vary depending on frequency of group sessions 8 patients per group

Type of bed	Psychiatrist	Total FTE	PhD	Total FTE	MA*	Total FTE	Total MH min's per ward per week
ITP cases/FTE's	30	7	30	7	15	14	
minutes per ward/week	60		60		120		240
SCP cases/FTE's	100	17	50	34	60	28	
minutes per ward/week	18		36		30		84
GPOP cases/FTE's	500	9	200	23	100	47	
minutes per ward/week	3.6		9		18		30.6
Total Suggested Clinical FTE		33		64		89	

*Masters level therapist.

B.4.4 A realistic timeline for implementation needs to be adopted. For this we suggest the following phased approach:

Phase 1 (Jan-June 2002) Maximizing existing resources.

Aggressive recruitment of mental health personnel, improved retention, reassignment and re-educaction of current practitioners should all be immediate goals for the system. Improved remuneration, cross coverage and the establishment of productivity goals along the formulas we have begun to outline are all in keeping with this approach.

The easiest way to improve the quality of care in the system at no additional resource cost is to stop making clinical staff spend their time on unproductive activities. A major shift would be to reduce the length and detail of parole board reports down to the level that a parole board will actually read and use, or consider using consultants rather than precious staff time for these formulaic assessments. A second productive goal would be for non-mental health professionals in the YOPB to stop imposing untested treatment enthusiasms on the system. Perhaps a system by which the YOPB receives a budget to pay for suggested treatments and assessments would help with becoming more realistic regarding their expectations.

Another laudable immediate goal is for the CYA and CDC to stop competing against each other for psychiatrists and psychologists. Pay should be comparable across systems. Retention of staff would be greatly helped if remuneration was equitable and fair, reflected work loads and expertise, allowed for educational pursuits within the system. Career paths should be created as well, aiming to retain those most interested and able.

Phase 2 (Jan 2002 – June 2003): Creating centers of excellence and foci for intervention

The CYA should partner with academic facilities expert in dealing with this population, to bring in more resources and information. Models exist in other states which might be helpful (New Hampshire- Dartmouth, for instance). More generally, it should invest more in staff training, to help staff become more in touch with the broader community that is implementing evidence-based mental health programs.

Because of the culture clash problems mentioned above, we believe the CYA should create more specialized facilities rather than make minor mental health investments in primarily correctional environments. We suggest focus on two problems, Cluster V (substance dependence) and Cluster I (Mood/ and anxiety and related problems).

The rationale for another substance abuse facility is clear. First, the TNA data shows that substance abuse is an extremely prevalent problem. Second, it is easier to identify reliably than are rarer types of psychopathology. Third, it is strongly related to future criminal behavior. Fourth, it is susceptible to treatment.

More specifically, we suggest another facility akin to Holton, but based in the Southern part of the state. What might such a facility look like? The CYA already has significant knowledge about how to operate a facility focused on addiction based on their experience with the Karl Holton facility. The description below provides a perspective complementary to that, based on the practice guidelines and research literature. The following is a possible model for a modern approach to adolescent substance abuse.

A Model for Adolescent Substance Abuse Treatment in the California Youth Authority (CYA)

The following proposes a detailed model for the state of the art treatment of substance abuse and dependence in the CYA. While this program is specifically designed to deliver the best mental health treatment to children with predominant Cluster IV and V problems, it could be modified to reflect the needs of the children in Clusters I and II respectively. Once a course of action is decided upon by the CYA, we would be delighted to submit such a model as

well. We propose though as an immediate goal to implement the program below, as it builds on existing staructures and will lead to benefits with a relative small investment of time and person power.

Considerable evidence suggests that treatment for SUDs should be provided over an extended period to better match the chronic nature of these disorders (e.g. Brown, D'Amico, McCarthy & Taper, 2001; McLellan et al., 2000). An optimal Substance Use Disorder treatment program in the CYA would provide access to a continuum of care possessing the following components:

- screening, assessment, and triage
- evidence-based treatment services tailored to the severity of the ward's SUD and his/her psychosocial problems and circumstances
- continuing outpatient care providing relapse prevention/supportive services
- ongoing monitoring of treatment and treatment outcomes

a.) Screening, assessment, and triage

Screening measures should be as brief as possible but sufficiently sensitive and specific enough to detect the presence of substance use related problems. Such devices are currently being evaluated and compared for optimal precision and efficiency (i.e., Steiner et al., 2001, this report). Since information obtained from a single informant is inherently biased to at least some degree, and substance use disorders are multidimensional in nature (AACAP, 1997) a broad-based biopsychosocial and diagnostic assessment using multiple informants (e.g. the ward, prior teachers, parents/guardians) should be obtained for every ward who is positive on a substance abuse screening device.

Most psychologists and psychiatrists are well equipped to carry out such interviews. Psychologists in particular are well equipped to integrate the detailed information obtained from a detailed history, together with objective and projective psychological tests to help formulate a treatment plan to address salient problem areas. Because chronic alcohol/drug abuse can induce signs and symptoms which mimic other psychiatric disorders as well as mask the presence of true comorbid psychiatric disorders, assessment clinicians should possess specific expertise in determining the independence and validity of apparent disorders.

Although assessment should be a continual process providing critical ongoing information regarding the effectiveness of the treatment plan, these initial in-depth assessment steps form the foundation on which effective and efficient triage may occur. Regarding the level of care for adolescents with SUDs, formal and explicit recommendations for decision making have been suggested and by the American Society of Addiction Medicine (ASAM) and are well explicated in the Patient Placement Criteria – 2nd Edition, Revised (2001; ASAM-PPC2R). These can provide a useful and systematic template from which to make triage decisions and are recommended.

b) Evidence-based treatment services tailored to the severity of the ward's SUD and his/her psychosocial problems and circumstances

The evidence base with regard to optimal treatment strategies for adolescent SUDs is still in its infancy compared to the treatment of adults. Traditional (12-Step), family systems, and cognitive-behavioral modalities form the mainstay of youth treatment programs. While traditional (12-Step) types of treatment (e.g., Design for Living used at Karl Holton) remain popular among youth treatment providers and possess some empirical support regarding their effectiveness (Alford, Koehler & Leonard, 1991; Winters, et al., 2000; Kelly et al., 1999; in press) a dearth of adequate comparative outcome studies mean that it is not currently known which kinds of strategies or modalities are optimal for youth. Given comparatively little research on youth treatment it is suggested that a treatment program for youth should: 1) embrace empirically validated techniques, even if initially borrowed from the adult-based literature; 2) take into account the unique developmental issues and problems characteristic of adolescence (e.g. ascendancy of the peer group, identity formation issues, limit testing); 3) make active efforts to identify key curative factors or mechanisms of change that underlie positive behavioral change; 4) consider the fact that adolescents with SUDs also have multiple other problems; 5) should strive to meet individual needs; (Wagner and Kassel, 1995).

Perhaps one of the most important aspects of youth SUD treatment has to do with increasing intrinsic motivation for change. Winning the respect and confidence of youth is a perennial challenge for treatment providers as they attempt to engage them in the treatment process (Swadi, 1992). In contrast to adults treated for SUDs, adolescents rarely recognize the impact that substance abuse is having or has had on their lives and rarely request treatment for themselves (Brown, 1993). Given the circumstances through which wards enter SUD treatment, to assume that they are ready and willing to change, but merely lack the ability, may result in a premature (and perhaps futile) focus on teaching abstinence-focused coping skills. Early on, a non-confrontational, non-directive, empathic therapist style and acknowledgement of the ward's reluctance may be critical to enhancing the therapeutic alliance (i.e., rapport and trust), the likelihood of retention in treatment and motivation for change (e.g., Jackson-Gilfort & Liddle, 1999). The therapeutic alliance as well as therapist style has shown to be an important factor in formal psychotherapy outcome studies (e.g., Luborsky, 1994; Miller, Benefield, & Tonigan, 1993). A recent study of the process of establishing an alliance with youth suggests helping the adolescent to set personally meaningful goals as well as being sensitive to the adolescent experience (Diamond, Liddle, Hogue, & Dakof, in press). Increasing open dialogue may be an important prerequisite to engaging youth in discussion of more sensitive matters such as substance use and potentially related issues of sexual or physical abuse. This may require an individual therapeutic approach combined with more usual group aspects. Once engaged, youth may be more open and able to see some consequences resulting from their substance use, which in turn may increase motivation for change and treatment engagement.

Twelve-step approaches were originally devised to help chronic alcohol dependent men and women (Alcoholics Anonymous, 2001) and the content of the 12 Steps and related reading materials require a mature cognitive capacity. Programs such as Hazelden's Design for Living are an adaptation designed specifically for juvenile offenders, however it is unclear to what extent the adapted content is responsible for any observed salutary changes in functioning. Further surveying may reveal staff and ward satisfaction with this approach and, ultimately, following adequately controlled comparative investigation, this type of approach with its abundant community linkages (i.e., 12 step meetings), may prove to be superior to others. However, alternative options for content drawn from empirically supported adult treatments, might include a cognitive-behavioral functional analysis of the role of substance use in the lives of the wards and relapse prevention (Marlatt & Gordon, 1985). Such endeavor tends to personalize substance use in much the same way as a written "first step" (from the 12-steps), but also identifies the function or role of substance use and associated triggers for use. When youth have a clearer understanding of the function of substance use in their own lives they may become more engaged and interested in learning skills to help them begin to meet developmental needs formerly met with substance use. Whatever the treatment strategies used it is vital to measure and compare their effects on targeted beliefs, attitudes and behaviors both during and following treatment in order to determine what treatment components work best and for whom.

From a systems standpoint, given that many wards are still nested within families (to which many will return) the functional dynamics within this system will likely affect the behavior of the focal adolescent. Family-based therapies have received the most empirical validation to date and meta-analytic reviews have supported their efficacy and effectiveness. When not the primary treatment modality, they form a crucial adjunct to other forms of treatment (Stanton & Shadish, 1997). Long-term improvement in adolescent substance use problems following inpatient treatment has been associated with improvement in their families' overall level of functioning (Stewart & Brown, 1995), while family support has been linked to reductions in problem behaviors (drug and alcohol use, school problems, and legal involvement) during the first three months following treatment (Barrett, Simpson, & Lehman, 1988). In this regard, obvious proximity to parents/guardians is very important during the wards' stay and families should be integrated as much as possible into treatment on parole unless it is deemed that such family involvement would clearly decrease the probability of a positive outcome for the ward (e.g., there is ongoing substance abuse by parents/caregivers, sexual or physical abuse perpetrated on the ward).

Adolescents suffering from SUDs are a heterogeneous group with wide-ranging variability with regard to age of onset, addiction severity, chronicity, and psychiatric comorbidity (Brown, 1990). Treatments should be appropriate for the wards and administered by staff properly trained to provide them. In addition, services should be available, either integrated within the specialty addiction clinic or via referral to other programs, to address SUD patients' medical and psychiatric co-morbidity, family/social problems, and academic/employment problems. Given

widespread prevalence, the issue of psychiatric comorbidity among wards with SUDs deserves special attention and, ideally, should be addressed in an integrated fashion. This is because it is important to highlight the reciprocal impact of each disorder on the clinical course of the other in order to ultimately decrease the probability of relapse to either disorder. Additionally, to underscore the fact that the use of non-prescribed substances can interact with and attenuate the effectiveness of prescribed psychotropic regimens intended to target specific syndromes or symptoms.

c) Continuing outpatient care providing relapse prevention/supportive services, and status monitoring

Continuum of care in the transition from CYA to parole is the most critical time for relapse/recidivism. The first six months post treatment has shown to be the highest risk period for relapse across many substances (Brown, 1993; Hunt, 1971). Intensive outpatient care with family/caregiver integration occurring a minimum of twice per week plus appropriate self-help group involvement (if applicable; Kelly et al. in press) for the first 6 months and a minimum of once per week for the following 6 months would help decrease the risk of relapse during this critical time of transition. Again, because of the heterogeneity of SUDs and risk profiles among wards, optimal pacing and intensity of delivered services would need to be determined through ongoing monitoring.

Inclusion of multiple systems in the ward's life may enhance the likelihood of maintaining therapeutic gains post-discharge. These multiple systems might include parole, police, school, peers, courts, and neighbors. Henggeler (1999; 1996) has devised a formal treatment (Multisystemic Family Therapy; MSFT) along these lines which attempts to effect adaptive pro-social changes using this broader network of social influences and is empirically supported. Parole agents and ward outcomes in multiple domains could likely benefit from effective use of such procedures.

Karl Holton Alcohol and Drug Treatment Facility's use of a Liaison Parole Agent to act as a go-between, in the critical transition from CYA to parole is a particularly good idea. Specifically, the role of facilitating institutional visits by parole field agents and community based agencies as well as staff visits to field operations and community agencies. Furthermore, Liaison Parole agents role in visiting and evaluating community resources, as well as assisting in the identification and development of these community resources are crucial pieces in facilitating ward transition to the field parole officer and aftercare resources.

This model of a treatment program should also modified and be applied to address the mental health problems we have clustered into diagnostic Cluster I.

d) Ongoing monitoring of care provided and patient outcomes

The ideal CYA treatment would have a system in place to monitor the quality of care and ward outcomes, in order to determine if practices identified in research trials as "efficacious" are actually effective when applied in routine clinical practice. With this kind of ongoing feedback into the system, protocols and regimens could be updated on a continuing basis hopefully leading to more efficient, effective and cost-effective treatment.

The demands on the state budget notwithstanding, every effort should be made to maintain the new resources invested in parole-based mental health services and indeed, to increase them in the long-term. The benefits to the wards and the public (i.e., reduced recidivism) are likely to be significant enough to justify the added investment in parole-based aftercare services.

e) any such shift to a more ambitious practice will need to be complemented by a carefully thought out and designed training and educational component.

We have begun a dialogue with administrators at the Youth Authority regarding the configuration and implementation of such a program. The current report clearly spells out the need for this program, and will provide some of the basic information needed to plan a cutting edge effort in the next few months to come. Details of this plan should then be made available to other academic institutions across the state to generate new interest and enthusiasm for creating partnerships throughout all parts of the system and in all parts of the state.

Phase 3 (January 2002 – July 2003) Thinking about the future

There should be an ongoing dialogue regarding the optimal configuration of the juvenile justice services in California between all members of the team, and the team and national and international experts with the goal to critically examine the efficacy of programs proposed, new programs and treatments available, implications of findings from the borderline between criminological and psychiatric approaches.

We anticipate this dialogue to be vibrant and stimulating for both sides, and to lead us to new ways to conceptualize delinquency, its treatment and prevention. The results of such a dialogue most likely cannot be fully anticipated right now, but more likely than not will lead us to do better justice to help the less fortunate children of our society become once again part of our future.

B.4.5. Limitations.

While this report is data and practice based and comprehensive, it is not exhaustive. There are many unknowns that remain which might influence recommendations and their outcomes. We are particularly mindful that often, shifts in emphasis in systems of care, such as the CYA, produce many unanticipated outcomes. A prime example of this would be the impact of the creation of a peer culture that exerts a positive mental health instead of a negative gang influence. But we are encouraged by the sheer fact that such a detailed report has been requested and obviously will be taken into consideration. We think that this could be the beginning of an exciting process which would result in the improvement of the lives of victims, perpetrators and their families: for all too often, these three happen to be very closely linked.

C. The Future and the Stanford-CYA collaboration

This report is the result of a long-standing cooperative research and consultancy partnership between the California Youth Authority and the Division of Child Psychiatry at the Stanford University School of Medicine. Dr. Steiner has served as a consulting research and clinical psychiatrist with the CYA for over fifteen years. During that time, he has conducted a number of studies of the CYA population, often with the direct assistance of the CYA Research Division. Dr. Steiner and many of his postdoctoral and pre-doctoral students, such as Ms. Silverman, Drs. Redlich, Cauffman, and Matthews, have worked closely with the Youth Authority on a number of projects. Many volunteered their time to assist the CYA in developing the mental health assessment battery for use at the CYA reception centers. They have an ongoing interest in developing assessment tools for seriously disturbed and delinquent youth and to assist in developing programs to serve these youths better. We hope to continue this strong affiliation as we implement the recommendations we made above. We would be happy to contemplate the configuration of model programs on selected campuses of the CYA to serve as a center of excellence for treatment, education, training and research. Other Departments of Corrections have started such partnerships with academic psychiatric centers to mutual benefit.

The California Youth Authority provides a natural research opportunity for studying serious juvenile offenders. It has a large population of serious juvenile offenders with a wide range of individual characteristics. It has a well-staffed Research Division with a long-standing, solid reputation for conducting quality research on a variety of issues. It has automatic access to all pertinent records and information on the wards in its care, making data collection easy and relatively inexpensive. It has considerable experience administering grants from federal agencies and other sources. Finally, it has an interest in being a leader in the development of sound delinquency-related policy in California as well as an interest in contributing to the national fund of knowledge regarding crime and delinquency.

Both institutions have complementary strengths and have benefited repeatedly from them. We hope to extend this strong association into the next decade in order to provide the most unfortunate youth with the best service that can be offered. Our recommendations repeatedly point to the need for an excellent training and education system in the

California Youth Authority, and the creation of a research system which addresses service configuration changes and their impact on individuals from a developmental psychiatric and criminological perspective.

To date, no *formal* partnership agreement exists between the CYA and Stanford University, but the similarity of interests among the researchers has resulted in strong historical ties. The project of implementing the improvements in the mental health care system in the CYA would afford an opportunity to develop contracting procedures that would facilitate cooperative ventures and collaborative research in the future. Of particular joint interest is the creation of a **Center for Juvenile Justice and Psychiatry**, which would have a clinical and research component, jointly staffed by members of the CYA and Stanford. Such a Center would have considerable potential for attracting external funding from Foundations and National Agencies (such as NIJ, NIMH). Helping design the services to address the needs of these youths would be an important first step in that direction.

APPENDIX A. References
REPRINTS ARE AVAILABLE FROM DR. STEINER UPON REQUEST.

AACAP Workgroup on Quality Issues (Principal author: Steiner, H.). Practice Parameters for the Assessment and Treatment of Children and Adolescents with Conduct Disorder. Journal of the American Academy of Child and Adolescent Psychiatry, 36(10) supplement: 122S-139S, 1997.

AACAP Workgroup on Quality Issues (Principal authors: Steiner H, Remsing L). Practice Parameters for the Assessment and Treatment of Children and Adolescents with Oppositional Defiant Disorder. Journal of the American Academy of Child and Adolescent Psychiatry (in preparation). Scheduled for 2002.

Achenbach, T.M. Manual for the Youth Self-Report & 1991 Profile. 1991.

Atkins, DL, Pumariega, AJ, Rogers K, Montgomery L, Nybro C, Jeffers G, & Sease S. Mental health and Incarcerated youth. I: Prevalence and nature of psychopathology. Journal of Child & Family Studies, 8,193-204, 1999.

Attkisson C & Greenfield, T. Client Satisfaction Questionnaire-8 and Service Satisfaction Scale-30. In: Maruish, Mark Edward; Ed; The use of psychological testing for treatment planning and outcome assessment, xv, 637(pp. 402-420). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc, 1994

Bartol C & Bartol A. Juvenile delinquency: A systems approach. Englewood Cliffs, NJ: Prentice Hall., 1989.

Bilchik, S.: Mental health disorders and substance abuse problems among juveniles. Fact Sheet #82. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. 1998

Borduin, C., Mann, B., Cone, L., Henggeler, S., Fucci, B., Blaske, D., & Williams, R. Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence, Journal of Consulting & Clinical Psychology, 63(4), 569-578, 1995.

Bowlby, J. Forty-Four Juvenile Thieves: Their characters and home life. London, Bailliere, Tindall & Cox, 1947.

Bromet E, Moos R, Bliss F: The social climate of alcoholism treatment programs. Archives of General Psychiatry, 33:910-916, 1976

Brestan, E. V., Eyberg, S. M. Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies, and 5,272 kids. Journal of Clinical Child Psychology, 27(2), 180-189, 1998.

Carrion V & Steiner H. Trauma and Dissociation in Delinquents. Journal of the American Academy of Child and Adolescent Psychiatry , 39 (3): 353-359, 2000.

Caspi, A., Elder, G., Herbener, E. Childhood personality and the prediction of life-course patterns. In L. Robins & M. Rutter (Eds.), Straight and devious pathways from childhood to adulthood (pp.13-35). England, UK: Cambridge University Press, 1990.

Cauffman E, Feldman SS, Waterman J, Steiner H. Posttraumatic Stress Disorder Among Incarcerated Females. Journal of the American Academy of Child and Adolescent Psychiatry 37(11):1209-1216, 1998

Chang K., Blasey C., Ketter T., Steiner H. Family Environment of Children and Adolescents with Bipolar Parents. Journal of Affective Disorders , 3, 73-78, 2001

Chang K., Steiner H., Ketter T. Psychiatric Phenomenology of Child and Adolescent Bipolar Offspring. Journal of the American Academy of Child and Adolescent Psychiatry 39, (4): 453- 460, 2000.

Cocozza, J. Responding to the mental health needs of youth in the juvenile justice system. Seattle, WA: The National Coalition for the Mentally Ill in the Criminal Justice System, 1992.

Cocozza, J. J., & Skowyra, K. R.: Youth with mental health disorders: Issues and emerging responses. Juvenile Justice: Journal of the Office of Juvenile Justice and Delinquency Prevention, VII (1), 3-13, 2000.

Cowles E, Castellano T, Gransky L. "Boot camp" drug treatment and aftercare interventions: An evaluation review. Washington D. C.: National Institute of Justice; Research in Brief, July 1995.

Crosby CA, & Reppucci, ND.The legal system and adolescents. In P. H. Tolan, & B. J. Cohler (Eds.), Handbook of clinical research and practice with adolescents (pp. 281-304). New York, NY: John Wiley & Sons, 1993.

Dahlberg, L. L., Potter, L. B. Youth violence: developmental pathways and prevention challenges. American Journal of Preventative Medicine, 20(1S), 2001.

Ellsworth R, Maroney R, Klett W, et al: Milieu characteristics of successful psychiatric treatment programs. American Journal of Orthopsychiatry, 41(3):427-441, 1971.

Espelage DL, Cauffman E, Broidy L, Mazerolle P, Piquero A, Steiner H. A Cluster-Analytic Investigation of MMPI Profiles of Serious Male and Female Offenders (under review), 2001.

Espinoza S, Litt I, Morrow S, Steiner H. Role models, extracurricular activities and gang membership: Are they associated? (in preparation) , 2001.

Estroff, T. W. (Ed.). Adolescent Substance Abuse Treatment. Washington, D.C.: American Psychiatric Publishing, Inc., 2001.

First MB, Spitzer RL, Gibbon M, Williams JBW: Structured Clinical Interview for DSM-IV Axis I Disorders--Clinician Version (SCID-CV). Washington, DC, American Psychiatric Press, 1997.

Foy DW, Madvig BT, Pynoos RS, Camilleri AJ: Etiologic factors in the development of posttraumatic stress disorder in children and adolescents. Journal of School Psychology Special Issue: Posttraumatic stress disorder.{US: Elsevier Science, Inc.} Vol 34(2), pp. 133-145, Sum 1996.

Friedman R, Kutash, K: Mad, bad, sad, can't add?: Florida adolescent and child treatment (FACTS)/ Tampa, Fl; Florida Mental Health Institute, Dept of Epidemiology and Policy Analysis, 1986

GAP Prevention Committee (Rae-Grant N, McConville B, Fleck S, Kennedy JS, Vaughan WT, Steiner H) Violent Behavior in Children and Youth. Journal of the American Academy of Child and Adolescent Psychiatry, 38(3): 235-241, 1999.

Geller, B., Reising, D., Leonard, H. L., Riddle, M. A., Walsh, T. Critical review of tricyclic antidepressant use in children and adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 38(5), 513-516, 1999.

Goodwin, R., Gould, M. S., Blanco, C., Olfson, M. Prescription of psychotropic medications to youths in office-based practice. Psychiatric Services, 52(8), 2001.

Graham, E., Walkup, J. T., Pliszka, S. R., Ernst, M. Nontricyclic antidepressants: Current trends in children and adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 38(5), 517-528, 1999.

Greenhill, L. L., Halperin, J. M., Abikoff, H., Stimulant medications. Journal of the American Academy of Child and Adolescent Psychiatry, 38(5), 503-512.

Grisso, T., Barnum, R., Famularo, R., & Kinscherff, R. Massachusetts Youth Screening Instrument, 1996.

Grisso, T., Barnum, R., Fletcher, K.E., Cauffman, E., Peuschold, D. Massachusetts Youth Screening Instrument for mental health needs of juvenile justice youths. Journal of the American Academy of Child & Adolescent Psychiatry Special Issue, 40(5), 541-548, 2001.

Grizenko N, Papineau D, Sayegh L. Effectiveness of a multimodal day treatment program for children with disruptive behavior problems. Journal of the American Academy of Child and Adolescent Psychiatry, 32, pp. 127-134, 1993.

Haapanen, R. Selective incapacitation and the serious offender: A longitudinal study of criminal career patterns. New York: Springer-Verlag, 1990.

Haapanen, R., Britton, L., Brooks, S., Forney, R. California Youth Authority Client Satisfaction Survey 2001. Sacramento, CA: California Youth Authority, 2001.

Haapanen, R., & Ingram, W. (2000). California Youth Authority mental health and substance abuse treatment needs assessment: Description and preliminary findings. Sacramento, CA: California Youth Authority, 2000.

Hardy L, Steiner H: Disruptive Behavior Disorders. Klykylo, W., Kay, J., Rube, D. (eds), Clinical Child Psychiatry, pp. 155-170, Philadelphia. W.B Saunders, 1998.

Hare, R. D., Hart, S. D., & Harpur, T. J. Psychopathy and the DSM-IV criteria for antisocial personality. Journal of Abnormal Psychology, 100, 391-398, 1991.

Hawkins S, Miller S, Steiner H. Externalizing Problems, Gender Differences and Puberty. In: Hayward C (ed.), Gender Differences at Puberty, London, UK, Cambridge University Press, 2001.

Hoagwood, K., Burns, B. J., Kiser, L., Ringeisen, H., Schoenwald, S. K. Evidence-based practice in child and adolescent mental health services. Psychiatric Services, 52(9), 1179-1189, 2001.

Huckaby W, Kohler M, Garner EH, Steiner H. A Comparison of the Weinberger Adjustment Inventory and the Minnesota Multiphasic Personality Inventory with Incarcerated Adolescent Males. Child Psychiatry and Human Development, 28(4): 273-285, 1998.

Ikeda, R.M., Dodge, K. A. (Eds.). Youth violence prevention: The science of moving research to practice. American Journal of Preventative Medicine, 20(1S), 2001.

Johnson S: Staff cohesion in residential treatment. Journal of Youth and Adolescence 10:221-232, 1981

Jones P., Campanaro A., Pacheco M., Cauffman, E., Wathney S., Ingram W., Haapanen R., Steiner, H. Ethnic variation of psychopathology in incarcerated youth, by self report. (in preparation), 2001.

Kaplan A., Steiner H. Evaluating and treating violent Behavior in Youth. The Psychiatric Times/Bipolar Disorder Impulsive Spectrum Letter. pp. 1-6, November, 2000.

Kaslow, N. J., Thompson, M. P. Applying the criteria for empirically supported treatments to studies of psychosocial interventions for child and adolescent depression. Journal of Clinical Child Psychology, 27(2), 146-155, 1998.

Kazdin A. Child and adolescent dysfunction and paths toward maladjustment: Targets for intervention.

Clinical Psychology Review Special Issue: Child and adolescent mental health, 12, 795-817, 1992. In: Klein, R. G., Abikoff, H. (1997). Behavior therapy and methylphenidate in the treatment of children with ADHD. Journal of Attention Disorders, 2, pp. 89-114, 1997.

Koopman C, Carrion V, Butler L, Sudhaker S, Palmer L, Steiner H. Delinquent's Mean Heart Rate During a Stressful Interview: Relationships to Dissociation, Childhood Adversity, Gender and Instructions. Journal of Trauma, (under review).

Koopman C., Carrion V., Steiner H. Response to Stress and Dissociation in Delinquents (in preparation).

Lipsey M: Juvenile delinquency treatment: a meta-analytic inquiry into the variability of effects, in Meta-analysis for explanation, Edited by Cook T (pp. 83-128). New York, Russell Sage Foundation, 1992

Loeber, R & Farrington D. Severe conduct problems: Risk factors and interventions for serious and violent juvenile offenders. Expert Panel. Journal of the American Academy of Child and Adolescent Psychiatry, (in press).

Lurigio, AJ. Drug treatment availability and effectiveness. Criminal Justice & Behavior Vol 27(4), pp. 495-528, Aug 2000.

Mendel, R: Prevention or Pork? A hard-headed youth-oriented anti-crime program, American Youth Forum, 1995.

Moffitt T, & Silva, P. Self-reported delinquency: Results from an instrument for New Zealand. Aust. N.Z. J. Criminology, 21, 227-240, 1988.

Moos R: Changing the social milieus of psychiatric treatments settings. Journal of Applied Behavioral Science, 9:575-593, 1973

Moos R: Evaluating treatment environments: A social ecological approach. New York, Wiley, 1974

Moos R, Otto J: The Community-Oriented Programs Environment Scale: A methodology for the facilitation and evaluation of social change. Community Mental Health Journal, 8(1): 28-37, 1972

Mrazek, P. J., & Haggerty, R. J. Reducing risks for mental disorders: Frontiers for preventive intervention research, Washington DC: National Academy Press, 1994.

Mulvey, E., Arthur, M., Reppucci, N. The prevention and treatment of juvenile delinquency: A review of the research. Clinical Psychology Review, 13: 133-167, 1993.

O'Driscoll MP, Evans R: Organizational factors and perceptions of climate in three psychiatric units. Human Relations 41(5):371-388, 1988.

Ollendick, T. H., King, N. J. Empirically supported treatments for children with phobic and anxiety disorders: current status. Journal of Clinical Child Psychology, 27(2), 156-167, 1998.

Pelham, Jr., W. E., Wheeler, T., Chronis, A. Empirically supported psychosocial treatments for attention deficit hyperactivity disorder. Journal of Clinical Child Psychology, 27(2), 190-205.

Pfohl B, Blum N, Zimmerman M. Structured Interview for DSM-IV Personality (SIDP-IV). Washington, DC, American Psychiatric Press, 1997.

Pumariega, AJ, Atkins DL, Rogers K, Montgomery L., Nybro C., Ceasar R., Millus D. Mental health and Incarcerated youth. II: Service utilization. Journal of Child & Family Studies, 8, pp. 205-215, 1999.

Reich, W., Shayka, J.J., Taibleson. Diagnostic Interview for Children and Adolescents (DICA), 1991.

Robins, L. Deviant children grown up: A sociological and psychiatric study of sociopathic personality. Baltimore, Md.: Williams & Wilkins, 1966

Ruchkin VV, Schwab-Stone M, Koposov R A, Steiner H. Violence Exposure, Personality and Posttraumatic Stress in Juvenile Delinquents. (under review).

Rutter M, Giller H., Hagell A: Antisocial behavior by young people. New York, NY: Cambridge University Press, 1998.

Ryan, N. D., Bhatara, V. S., Perel, J. Mood stabilizers in children and adolescents. Journal of the American Academy of Child & Adolescent Psychiatry, 38(5), 529-536, 1999.

Schildhaus S, Gerstein D, Brittingham A., Cerbone F, & Dugoni B. Services research outcomes study: Overview of drug treatment population and outcomes. Substance Use & Misuse Vol 35(12-14), pp.1849-1877, Oct-Dec 2000.

Sholevar, G: Conduct disorder in children and adolescents. Washington, DC: American Psychiatric Press, Inc., 1995.

Snyder, J. National report on juvenile offending and victimization. Washington D.C.:Office of Juvenile Justice and Delinquency Prevention, May 1994.

Soler ML: The treatment of juveniles in the United States. Youth Law Center. Penal Reform International Conference. San Juan, Puerto Rico, 1996.

Steinberg L & Cauffman E. Newsletter of the Society for Research in Child Development, 2001

Steiner H.: Stemming The Tide Of Youth Violence: How Can Child Psychiatrists Can Get Involved? Newsletter of the American Academy of Child and Adolescent Psychiatry, 26(6), pp. 9-31, November/December 1995.

Steiner H.: Gangs and Child Psychiatry: Lord of the Flies Revisited. The DevelopMentor Newsletter. Vol. III, Issue 2, Spring 1996.

Steiner H. (editor): Treating Adolescents, San Francisco, Jossey-Bass, 1996.

Steiner H. Mental Health Services for Juvenile Delinquents. The Journal of the California Alliance for the Mentally Ill, 14: 73-5 1999.

Steiner, H. Disruptive Behavior Disorders. In: Kaplan, H.I., Sadock, B.J.(eds) Comprehensive Textbook of Psychiatry/VII. vol 2, pp 2693-2703, N.Y, Williams & Wilkins, 1999.

Steiner H. The Evaluation And Management Of Aggression In Juveniles. New Directions In Psychiatry, (Accepted For Publication), 22(March): pp, 2002.

Steiner H.(Ed). Treatment and Development: Mental Health Interventions in Youth. San Francisco, Jossey-Bass, 2002.

Steiner H, Araujo K, Koopman C. The Response Evaluation Measure: A New Instrument for the Assessment of Defenses American Journal of Psychiatry, 158 (3): 467-473, 2001.

Steiner H, Carrion V, Silverman M, Petersen M, Chang K. Divalproex Sodium in the Treatment of symptoms of PTSD and Aggression in Conduct Disorders. (in preparation).

Steiner H, Cauffman E. Juvenile Justice, Delinquency and Psychiatry. In: Berkowitz SJ, Adnopoz J (eds.): Child and Adolescent Psychiatric Clinics of North America, 7(3): 653-672, The Child Psychiatrist in the Community. Philadelphia, W.B. Saunders, 1998.

Steiner H, Cauffman E, Duxbury E. Personality Traits in Juvenile Delinquents: Relation to Criminal Behavior and Recidivism. Journal of the American Academy of Child and Adolescent Psychiatry 38 (3): 256-262, 1999

Steiner H, Dunne J. Summary of the Practice Parameters for the Assessment and Treatment of Children and Adolescents with Conduct Disorder. Journal of the American Academy of Child and Adolescent Psychiatry, 36(10): 1482-1485, 1997.

Steiner H, Feldman S. Child or Adolescent Antisocial Behavior. In: Kaplan, H.I., Sadock, B.J.(eds) Comprehensive Textbook of Psychiatry/VII, vol 2, pp 2903-2909, N.Y, Williams & Wilkins, 1999.

Steiner H, Garcia I, Matthews Z: Post Traumatic Stress Disorder in Incarcerated Juvenile Delinquents: Journal of the American Academy of Child and Adolescent Psychiatry, 36 (3), 357-365, 1997.

Steiner H, Garner, E.H., Hawkins S: Over-restrained Juvenile Delinquents: The Risk of Being a Survivor. Clinical Child Psychiatry and Psychology (under review), 2000.

Steiner H, Gill S, Pavelski R. Trauma Following Shooting Incident in High School (in preparation).

Steiner H., Hernandez N., Petersen M., Stacks P. The Sociotherapeutic Characteristics of an Extended System of Care for Pre- and Delinquent Youths. Child Psychiatry and Human Development, (under review), 2001.

Steiner H, Marx L, Walton C: The Ward Atmosphere of a Child Psychosomatic Unit: A Ten-year Follow-up. General Hospital Psychiatry ,13:246-252, 1991

Steiner H, Pavelski R, McQuivey R, Brassington G. The College Health Related Information Survey (CHRIS-73): A Screening Instrument for College Athletes (in preparation).

Steiner H, Petersen M, Ford S, Matthews Z. A Randomized Clinical Trial of Divalproex Sodium in Conduct Disorders. Journal of Clinical Psychiatry, (under review), 2001

Steiner H, Petersen M, Chang K, Tinklenberg J, Kraemer H. Divalproex Sodium in Delinquents: Predictors of Response. (in preparation), 2001.

Steiner H, Redlich A. Child Psychiatry and Juvenile Justice. In: Lewis M, (editor). Child Psychiatry, Williams & Wilkins, 2002.

Steiner H., Stone L. Violence and Related Psychopathology Journal of the American Academy of Child and Adolescent Psychiatry 38 (3): 232-234, 1999.

Steiner H, Thompson H, Erickson S, Yonous, S, Carrion, V. Personality and Psychopathology in Delinquents with Low Arousal. (in preparation).

Steiner H, Wilson J. Conduct Disorders. In: Hendren R (ed). Review of Psychiatry, vol 18: Disruptive Behavior Disorders in Children and Adolescents, pp 47-98. Washington, D.C. APA Press, 1999.

Steiner H, Williams, SE, Benton-Hardy L, Kohler M, Duxbury E: Violent Crime Paths in Incarcerated Juveniles: Psychological, Environmental, and Biological Factors. In: Raine A, Farrington, D, Brennan P, Mednick, S (eds) The Biosocial Bases of Violence, pp. 325-328, New York, Plenum, 1997

Teplin, L. Work in progress, 2001

Timmons-Mitchell J., Brown C., Schulz SC, Webster, S E., Underwood, LA., & Semple, W.E. Comparing the mental health needs of female and male incarcerated juvenile delinquents, Behavioral Sciences & the Law Special Issue: Juvenile Justice, 15(2), pp. 195-202, Spr 1997.

Tinklenberg, J., Steiner, H., Huckaby, W., Tinklenberg, J. Criminal recidivism predicted from narratives of violent juvenile delinquents. Child Psychiatry and Human Development, 27, 69-79, 1986.

Wakefield JC. Disorder as harmful dysfunction: A conceptual critique of DSM-III--R's definition of a mental disorder. Psychological Review, 99,pp. 232-247, 1992.

Weinberger D, & Schwartz G. Distress and restraint as superordinate dimensions of self-reported adjustment: A typological perspective. Journal of Personality, 58, pp.381-417, 1990.

Williams S & Steiner H: Childhood Trauma. In: Klykylo W, Kay J, Rube D (eds), Clinical Child Psychiatry, pp. 263-277, Philadelphia. W.B Saunders Company, 1998.

Wilson J, Rojas N, Haapanen R, Steiner H. Substance Abuse and Criminal Recidivism: A Prospective Study of Adolescents. Child Psychiatry and Human Development, 31(4): 297- 312, 2001.

Wilson J, Steiner H. Conduct Problems, Substance Abuse and Social Anxiety. (accepted for publication), Clinical Child Psychiatry and Psychology, 2001

Wilson J, Williams S, Garner EH, Steiner H. Restraint and Peer Associations in Juvenile Delinquents. The Jefferson Journal of Psychiatry, (in print), 2001

Work Group on Borderline Personality Disorder (Oldham, J. M. , Philips, K. A., Gabbard, G. O., Goin, M. K., Gunderson, J., Soloff, P., Spiegel, D., Stone, M., and others). Practice guideline for the treatment of patients with borderline personality disorder. The American Journal of Psychiatry, 158(10S), 2001.

Zelenko M, Huffman L, Brown WJ, Daniels K, Lock J, Kennedy Q, Steiner H. The Child Abuse Potential Inventory and Pregnancy Outcome in Expectant Adolescent Mothers, (accepted for publication), International Journal of Child Abuse & Neglect, 2001.

Zelenko M, Lock J, Kraemer H, Steiner H. Perinatal Complications and Child Abuse in a Poverty Sample. Child Abuse & Neglect, 24: 939-950, 2000

Zelenko, M., Huffman, L., Lock, J., Kennedy, Q., & Steiner, H.. Poor adolescent expectant mothers: can we assess their potential for child abuse? Journal of Adolescent Health, 29:271-278, 2001

Zoccolillo, M., Pickles, A., Quinton, D., Rutter, M. The outcome of childhood conduct disorder: Implications for defining adult personality disorder and conduct disorder. Psychological Medicine, 22, pp. 971-986, 1992.

APPENDIX B. Interview Guide for CYA Site Visit.

INFORMATION COLLECTION PROTOCOL FOR CYA PROGRAMS
FINAL VERSION

Instructions: For each CYA mental health program, we want to gather all of the information in this form. Some of this can be obtained from the program catalog, some from site visits, and some from telephone interviews.

In this survey, "site" refers to CYA facilities, which may comprise more than one program. For example, the O.H. Close facility comprises a sex offender program (Humboldt), a substance abuse program (Butte), and a general population mental health service.

Instructions for Telephone Interviews: Arrange with the director of the treatment program to conduct a telephone interview. The purpose of the interviewer is to gather basic facts about the program efficiently that we did not or could not easily obtain in a site visit or from the program catalog. N.B. a CYA site may contain more than one mental health program.

Verbal Instructions to Interview Respondents: Thank you for taking the time to help us understand your program better. Because we know you have many demands on your time, we have kept this interview brief and we should be finished in 20-30 minutes. Some of the questions ask you to estimate numbers, for example how long wards have contact with your programs. If any of these require you to consult records, we can skip that question for the moment and I will contact you later when you have a chance to consult your records for the correct information.

To be completed by Interviewer/Site Visitor:

My name is: _____

The person I am interviewing is: _____

The name of the mental health program we are discussing:_____

The CYA site at which the program is based is:_____

Today's date is:_____

A. SETTING AND PROGRAM CHARACTERISTICS

1. What kind of mental health service is this? (CHECK ONE ONLY)

Intensive Treatment Program ☐1

Specialized Counseling Program ☐2

Substance Abuse Treatment ☐3

Sex Offender ☐4

General Population (SKIP TO ITEM 5) ☐5

2. How many operational mental health service beds does your program have? _____
# of Beds

3. How many of these beds are occupied as of today? _____
# of Beds

4. What has the been the average bed occupancy rate in the past 12 months? _____
% of Beds

5. What is the average length of time over which wards receive services from your program? _____
# of Days

6. How many wards were treated by this program in the past 12 months? _____
(Wards treated multiple times should be counted only once) # of Patients

7. As of today, how many wards are on a waiting list for your program? _____ (Indicate NA if this program does not maintain a waiting list) # Wards

B. ADMISSION, ASSESSMENT AND DISCHARGE

8. Please indicate whether wards with the following characteristics are accepted into your program:

	Yes	No
Seriously affected by hallucinations or paranoid delusions	☐	☐
Serious danger to self	☐	☐
Serious danger to others	☐	☐
Serious physical illness	☐	☐
Diagnosed with a substance use disorder	☐	☐

9. All mental health programs at times have to deal with difficult behavior by patients that may make it impossible for treatment to continue. We would like to know how your program handles such situations. Please indicate which of the following behaviors would be likely to result in a ward being expelled from the program:

	Expulsion likely on first occurrence of this behavior		On multiple occurrences of this behavior	
	No	Yes	No	Yes
a. Refusing to participate in programmed activities	☐	☐	☐	☐
b. Disrupting therapy sessions, community meetings or other group activities	☐	☐	☐	☐
c. Refusing to take prescribed medication	☐	☐	☐	☐
d. Refusing to bathe or clean oneselfregularly	☐	☐	☐	☐
e. Damaging or destroying property	☐	☐	☐	☐

f. Verbally threatening a staff member	☐	☐	☐	☐
g. Physically harming a staff member	☐	☐	☐	☐
h. Verbally threatens another ward	☐	☐	☐	☐
i. Physically harms another ward	☐	☐	☐	☐
j. Uses drugs or alcohol	☐	☐	☐	☐
k. Threatening to attempt suicide	☐	☐	☐	☐
l. Engaging in other self-destructive behaviors (e.g. burning or cutting self)	☐	☐	☐	☐
m. Making sexually suggestive remarks or gestures	☐	☐	☐	☐

10. What standardized instruments or assessment procedures does this program employ most frequently (LIST NAMES OF UP TO 5)?

Instrument #1: _____

Instrument #2: _____

Instrument #3: _____

Instrument #4: _____

Instrument #5: _____

11. About what percentage of wards complete your program?

Return for follow-up/aftercare visits at your program: _____
Receive follow-up/aftercare services at other CYA programs: _____
Are readmitted to your program for re-treatment: _____
Have a written discharge summary and follow-up plan in their file: _____

12. Please briefly describe in your own words any standardized assessment and decision-making procedures/algorithms staff engage in when they think a ward may be suicidal

---

_____

_____

D. TREATMENT SERVICES

13. How influential are the follow treatment philosophies in your program?

	Not influential	Minor	Major Influence	
Behavioral/Cognitive-Behavioral	☐	☐	☐	
Therapeutic Community	☐	☐	☐	
Family systems	☐	☐	☐	
Psychodynamic	☐	☐	☐	
12-step	☐	☐	☐	

Other (Specify)_____ .....☐ ☐ ☐

14. If your program uses any manualized treatments, please list the names of up to three of the most commonly employed. By a treatment manual, we mean a book that lays out specific treatment strategies, the situations in which to apply them, and the desired course of treatment.

    Manual #1_____
    Manual #2: _____
    Manual #3: _____

15. Below is a list of treatment services this program may provide. For each type of service indicate the estimated percentage of wards at your treatment program who receive the service directly from program staff. Where applicable, please also indicate the average number of hours per week each activity is provided to those patients receiving that service.

Service	Percent of Wards	Average Number of Hours per Week Receiving this
a. Psychological/Psychiatric Assessment	_____a1.	_____
b. Gang Awareness Services	_____b1.	_____
c. Victim Awareness Services	_____c1.	_____
d. Social thinking skills/social skills training	_____d1.	_____
e. Substance abuse-related self-help groups (e.g., Narcotics Anonymous)	__e1.	_____
f. Substance abuse-related group or individual psychotherapy	_____f1.	_____
g. Group or individual therapy related to psychiatric problems	_____g1.	_____
h. Family psychotherapy/counseling	_____h1.	_____
i. Educational services for Learning/Developmentally Disabled	_____i1.	_____
j. Vocational rehabilitation or work training	_____j1.	_____
k. Psychotropic Medication	_____NA	

STAFFING

For all questions in this section, count only paid staff, not volunteers.

16. Please list the total full-time equivalents for mental health staff authorized for this program for each job title as of today. By authorized, it means a position that is based in your program, whether it is filled at the moment or not. Please tell me how many positions you have, and, how many of them are filled as of today.

Position/Job Title	FTE Authorized	FTE Filled
a. Psychiatrist		
b. Psychologist		
c. Physician Assistant, RN, Nurse Practitioner		
d. Program Administrator		
e. Supervising Casework Specialist		
f. Treatment Team Supervisor		
g. Social Worker (MSW, CSW, ACSW etc.)		
h. Senior Youth Correctional Counselor		
i. Youth Correctional Counselor		
j. Youth Correctional Officer		
k. Parole Agent		
l. Vocational Rehabilitation Specialist		
m. Secretary, Administrative Assistant, Clerk		
n. All other staff		
o. TOTAL FTE IN THIS PROGRAM		

17. Please think about your staff collectively and make the best ballpark estimate you can: What percentage of your staff's time is spent providing direct, face-to-face mental health services to wards, as opposed to for example doing paperwork, being in meetings, doing administrative duties, and the like

_____
0-100 Percent

18. How many program staff have been employed in this program for the following lengths of time

# of staff

a. Less than 1 year……._____
b. 1 – 4 years……._____
c. 5 years or more……._____

APPENDIX C. Client Satisfaction Survey (Haapanen et al., 2001).

California Youth Authority
Client Satisfaction Survey
2001

PLEASE CIRCLE ALL ANSWERS

1. DO YOU KNOW IF THE YOUTH AUTHORITY HAS PROGRAMS, SUCH AS SPECIAL COUNSELING, SEX OFFENDER OR DRUG PROGRAMS, TO HELP YOU WITH YOUR PERSONAL PROBLEMS? *(CIRCLE ONE)* YES NO / I DON'T KNOW

2. IF YOU HAD A PERSONAL PROBLEM, SUCH AS DRUGS, FAMILY OR SEX RELATED, WHO WOULD YOU TALK TO: (*PLEASE CIRCLE ALL YES' THAT APPLY)*

YCC OR CASELOAD	YES	CHAPLAIN	YES
SENIOR YCC	YES	SECURITY STAFF	YES
UNIT/LODGE PAROLE AGENT	YES	FOSTER GRANDPARENTS	YES
TEACHER	YES	VOLUNTEERS	YES
CASEWORKER	YES	FRIENDS	YES
PSYCHOLOGIST/PSYCHIATRIST	YES	OTHER _____	YES
SCHOOL PSYCHOLOGIST	YES		

WHO WOULD YOU TALK TO FIRST, IF YOU HAD A PERSONAL PROBLEM? (EXCEPT 'FRIENDS')
USING THE ABOVE LIST, PLEASE WRITE YOUR ANSWER BELOW

_____

3. DID YOU HAVE HELP WITH YOUR PERSONAL PROBLEM? *(CIRCLE ONE)* YES NO / I DON'T KNOW

4. IF YOU ANSWERED YES TO #3, WERE YOU SATISFIED WITH THE HELP YOU RECEIVED? *(CIRCLE ONE)*

YES SOMEWHAT NOT MUCH NO

5. WHAT SPECIAL PROGRAMS HAVE YOU HAD: *(CIRCLE ONE FOR EACH QUESTION)*

(a) INTENSIVE TREATMENT PROGRAM, SUCH AS REDWOOD, MARSHALL OR WINTU YES NO / I DON'T KNOW

(b) SPECIALIZED COUNSELING PROGRAM, SUCH AS BUENA VENTURA, MCCLOUD OR OAKYES NO / I DON'T KNOW

6. HAVE YOU HAD COUNSELING: *(CIRCLE ONE FOR EACH QUESTION)*

(a) FROM A PSYCHIATRIST YES NO / I DON'T KNOW

(b) FROM A PSYCHOLOGIST YES NO / I DON'T KNOW

(c) FROM ANY OTHER STAFF, FOR EXAMPLE A YCC/CASELOAD OR PAROLE AGENT — YES NO / I DON'T KNOW

7. HOW OFTEN HAVE YOU HAD COUNSELING? *(CIRCLE ONE)*

0-1 TIMES A WEEK 2-4 TIMES A WEEK 5-7 TIMES A WEEK 8-10 TIMES A WEEK

8. DO YOU THINK COUNSELING HELPED? *(CIRCLE ONE)*

A GREAT DEAL SOMEWHAT DIDN'T HELP MADE THINGS WORSE

California Youth Authority
Client Satisfaction Survey
Consent Form

Thank you for your help with this important task! With your help, we hope to make the Youth Authority better for all young men and women who spend time with us.

Before filling out the survey, please read the following statements. If you have questions about the survey, ask the staff member who gave you this form. If you understand the following statements and agree to participate, please sign at the bottom and provide your YA identification number.

- I understand that completing this survey is completely **voluntary**. I understand I will not receive any money for doing this survey.
- I understand Research Division staff will use the information to help improve services and programs for wards in the Youth Authority.
- I understand that if I choose not to complete the survey**, no action will be taken against me**. The Youthful Offender Parole Board will not know whether I have been asked to complete the survey or whether or not I chose to do so.
- I understand that no one but the Research Division will see my responses to this survey. None of the information will be given to anyone else or to other CYA staff until my name, YA number, and other "identifying" information are removed.
- If you have any questions or concerns about this survey or your rights as a participant, you may go through your internal grievance system, write to the Director of the Youth Authority or you may contact the Office of the Ombudsperson at (916) 262-1024.
- If you feel you have suffered any stress from completing this survey, please inform your living unit staff.

Please print and sign your name below and write in today's date. Please also write your YA identification number in the space provided.

Name: _____ (print)

Name: _____ (sign)

Date: _____ YA Number: _____

APPENDIX D. Acronyms & CYA Institutions

Acronyms

CBT = Cognitive Behavioral Therapy

CDC = California Department of Corrections

CTC = Correctional Treatment Center

DFL = Design for Living

DOT = Direct Observation Therapy

GP = General Population

I&C = Institutions and Camps

ITP = Intensive Treatment Program

OHU = Outpatient Housing Unit

RSAT = Residential Substance Abuse Treatment

SCP = Specialized Counseling Program

SMU = Special Management Unit

SMP/TD = Special Management Unit/Temporary Detention

SOR = Sex Offender Referral Score

SPAR = Suicide Risk Screening Questionnaire

SUD = Substance Use Disorder

TNA = Treatment Needs Assessment

UHR = Unified Health Record

YA-GAF = Youth Authority Global Assessment of Functioning

YCC = Youth Correctional Counselor

YCO = Youth Correctional Officer

CYA Institutions

Dewitt Nelson Youth Correctional Facility (**DWNYCF**)

El Paso de Robles Youth Correctional Facility (**EPDRYCF**)

Fred C. Nelles Youth Correctional Facility (**FCNYCF**)

Heman G. Stark Youth Correctional Facility (**HGSYCF**)

Karl Holton Youth Correctional Drug & Alcohol Treatment Facility(**KHYCDATF**)

N.A. Chaderjian Youth Correctional Facility (**NACYCF**)

Northern Youth Correctional Reception Center & Clinic (**NYCRCC**)

O.H. Close Youth Correctional Facility (**OHCYCF**)

Preston Youth Correctional Facility (**PYCF**)

Southern Youth Correctional Reception Center and Clinic (**SYCRCC**)

Ventura Youth Correctional Facility (**VYCF**)

APPENDIX E. Guideline: Parole Case Supervision System.

DEPARTMENT OF THE YOUTH AUTHORITY

PAROLE SERVICES AND COMMUNITY CORRECTIONS BRANCH

PAROLE CASE SUPERVISION SYSTEM

When the institution case report recommending referral to parole is received, a determination is made by the parole casework supervisor to whom the case will be assigned and the level of supervision/service to be provided. Factors include the committing offense, age of the ward, institutional program, the level of public safety risk the ward poses to the community, and case service needs. A pre-placement conference is conducted with the institution either in person or via telephone to review the most current relevant case information and discuss case planning approaches and wards' strengths and weaknesses. Appropriate special conditions of parole are also discussed at this time.

Upon release to parole the ward is assigned to one of four parole case management system components, which are:

- Electronically Enhanced Parole Release Supervision
- Intensive Reentry Supervision and Services
- Specialized Caseloads
- Case Management Caseloads

This system functions as a "step-down" process. As a ward advances through the parole term, the need for supervision and services tends to lessen. As such needs abate, a corresponding reduction occurs in relationship to the degree of risk to public safety. Following is a description of each component.

ELECTRONICALLY ENHANCED PAROLE RELEASE SUPERVISION

This program includes Board Hearing Category 4 through 7 cases scheduled for release. It is an institutional conditional release program designed to achieve bed savings, while at the same time enhancing parole supervision. It would reduce the length of stay by 60 days for selected YOPB Category 4-7 wards. Parolees are released to a highly structured parole supervision program based on a 15 to 1 caseload ratio, augmented with electronic monitors, thereby creating a quasi-institutional type of surveillance. Wards are contacted personally every week and drug tested at least twice per month. This intensive supervision is substantially enhanced by electronic monitors to provide 24-hour surveillance. Response to suspected violations will be timely and minor program failures, like schedule violations, could result in such sanctions as loss of privileges or temporary detention. Program failures are as failures on parole and subject to violation action. Various sanctions up to and including revocation can be imposed for any violation. Other than pre-authorized departures such as seeking employment, school attendance,

vocational training, and mandated counseling (substance abuse/psychiatric/psychological) the parolee is on home-detention status. Those successfully completing the 60-day period are assigned to intensive reentry caseloads.

INTENSIVE REENTRY

Intensive Reentry is designed to increase public protection by early detection and prevention of parole violations, and to provide maximum services during the most critical period, e.g., the transition from institutional to community living. Caseload ratios are 15:1. Each parole unit provides intensive reentry services, in areas where it is geographically feasible. The duration of intensive reentry services averages 75 days for Board Hearing Category 4-7 cases, and is 90 days for Board Hearing Category 1-3 cases. Cases can be provided reentry services longer than 90 days if needed. These services include two contacts per week for the first 30 days and weekly contacts for the duration of the reentry period, twice monthly substance abuse testing for wards with such problems, employment/education/job training assistance, individual and group counseling, and subsidized placement and other services as needed and available.

SPECIALIZED CASELOADS

Each parole unit has one or more specialized caseloads, based on local needs. Parole agents are assigned fewer cases than those with case management caseloads are. The caseload ratio is 30:1. The purpose is to provide concentrated, intensive services for parolees with special needs, e.g., severe substance abuse, sex offenders, those with mental problems, those needing specialized placement and parolees heavily involved in gang activity. Specialized caseloads increase the likelihood of wards' successful adjustment as self-supporting and contributing members of the community, and enhance the ability of the parole agent to identify potentially dangerous behavior at the earliest possible time. The public receives maximum protection when parole agents focus their efforts on problems and behaviors that pose the greatest threat to public safety. Parolees typically remain on specialized caseloads until they have exhibited stable behavior for a significant period of time and no longer pose a major threat to public safety or need intensive services. Under normal circumstances, cases would transfer to case management before discharge.

CASE MANAGEMENT

Parolees are transferred to case management after intensive reentry or upon transitioning from a specialized caseload. Wards are seen a minimum of twice per month if classified as maximum supervision/service, and once if classified medium. The purpose of case management is to assist the parolee in maintaining acceptable levels of

behavior, job and placement stability. Before transfer to case management, high service/high need areas should have been addressed, thereby reducing the risk to the community. Parole agent activities are less service intensive and focus primarily on monitoring the parolees' behavior through unannounced testing, periodic visitation both on the job and at home, and a variety of collateral contacts. The parole agent is assigned 52 parolees. The primary goal for both the parolee and the parole agent is to achieve an honorable discharge either before or at the date of expiration of jurisdiction. Another important element of the case management component is minimum supervision, when parolees are nearing discharge and will ultimately be on their own.

Parolees on minimum supervision are those who meet one or more of the following criteria:

- On parole for at least one year; employed no violations; no dirty tests.
- Juvenile court commitment with no Available Confinement Time (ACT).
- In custody, either awaiting sentence or serving sentence and continued on parole by the Board.
- Missing for at least six months, with no family or other known contacts in the immediate area.

Parolees placed on minimum supervision caseloads are assigned to the parole agents and included in the case management ratio of 52:1. For those cases meeting the first criteria, contacts would be made at least every other month. These cases would normally require the least amount of service and pose the lower risk, but for public safety reasons parole jurisdiction is retained. Regarding the other categories, upon location of missing wards or completion of local sentences, cases are reclassified based on service need and risk level. For the juvenile court commitment with no ACT it becomes a matter of monitoring parolee behavior, providing surveillance and referring to necessary services as needed.

The flexibility of the entire case management system is inherent in required case reviews that are mandated at specific intervals. A case may be reclassified (higher or lower) based on circumstances and moved from one type of caseload to another based on service needs and risk levels. Cases are required to be reviewed within: (1) 45 days after release on parole, (2) 90 days from the release date, and (3) every 120 days (or earlier) thereafter. At each case conference classification, needs and parole performance assessments are completed.

As described above, linkages with the Institutions are established early in a wards' commitment to the Youth Authority. The degree of linkage is determined by the severity of the wards behavior, risk/service needs and logistic considerations. It should be noted that in cases who have been identified and released from Intensive Treatment Programs, Specialized Counseling Programs, High Violence/Intractable, and Substance Abuse Programs, there is a high probability that they would receive optimal reentry supervision and services and then be assigned either to a specialized caseload or the maximum supervision level and remain until such time as the need no longer dictates the intensive services.

CORRECTIVE ACTION PLAN (CAP)

Interventive techniques practiced over the past decade indicate that the parole revocation rate can be reduced significantly if sanctions are applied swiftly, consistently and in a stepped up fashion when wards begin to commit technical violations. Parole Services and Community Corrections Branch utilizes the Corrective Action Plan. This system classifies each violation into one of three levels using the one of the pre-approved guidelines in order to hold wards accountable for their behavior in a timely manner. Level 1 and 2 violations are in lieu of the violation process if the ward signs a waiver pending Youthful Offender Parole Board (YOPB) review and are reported using the Corrective Action Plan format. Level 3 violations are always reported on Violation/Disposition Reports.

The levels are defined as follows:

- Level 1 - The reporting of minor violations of the conditions of parole, positive drug tests and minor law violations.
- Level 2 - The reporting of selected law violations or moderate to serious technical violations where staff feels that the ward would benefit from the imposition of interventive sanctions short of revocation.
- Level 3 - The reporting on new serious law violations on the conventional Violation/Disposition report as well as offenses too serious to report per Level 1 and 2 where parole staff plan to recommend either parole revocation or continuation on parole with special treatment.

FOUTS SPRINGS AND SOUTHERN CALIFORNIA DRUG TREATMENT PROGRAM

Fouts Springs (44 beds) and the Southern California Drug Treatment Program (60 beds) are in lieu of revocation programs which are specifically designed to meet the substance abuse needs of parolees who have received either Level 1 or Level 2 sanctions under the Corrective Action Plan. Both programs provide a relapse prevention model to address the needs of these substance abusers and also augment their programs with community public service modules.

APPENDIX F. Tables.

Table 1. Prevalence of serious psychiatric disorders among CYA wards

Criteria	Females N=140	Males N=650	Total N=790	**General Population**[1]
Cluster I N=400	73%	46%	51%	
Mood (Mania/Bipolar & Depression)	29%	9%	12%	
Mania/Bipolar	3%	1%	1%	0.4-1.6% DSM Adults
Depression	24%	8%	11%	4-8% AACAP MDD Males:Females 1:2
Anxiety	55%	26%	31%	8.7% AACAP
Obsessive Compulsive Disorder	9%	2%	3.4%	1-3.6% DSM
PTSD	13%	8%	9%	1-4% AACAP
Social Phobia	3%	4%	3%	1% AACAP
Generalized Anxiety Disorder	5%	3%	3%	3% 1 year DSM
Separation Anxiety Disorder			16%	4% DSM in Children
Cluster B2 (Borderline)	41%	13%	18%	2% DSM
ODD	31%	26%	27%	2-16% DSM
True ODD (occurs w/o the Dx of CD)			<1%	
Cluster II N=121	24%	14%	15%	
Psychosis	5%	4%	4%	
Schizophrenia			0.3%	.2-2% DSM
ADHD	16%	8%	10%	3-5% DSM
Cluster A (Schizoid & Schizotypal)	5%	5%	5%	
Schizoid	4%	2%	3%	Uncommon in clinical settings, DSM
Schizotypal	2%	2%	2%	3% DSM
Cluster III N=46	15%	4%	6%	
Somatoform disorders	3%	1%	2%	
Eating	4%	<1%	1%	Anorexia:.5-1% Bulimia: 1-3% DSM

Adjustment Disorders	10%	2%	3%	5-20% of outpatient population, DSM
Cluster IV (All wards with Abuse who do not fall into Cluster I-Cluster III): N=158			20%	
Substance Use Disorders	85%	85%	85%	
Alcohol Abuse	28%	21%	22%	5% DSM
Criteria	Females N=140	Males N=650	Total N=790	
Substance Abuse	19%	26%	25%	
Cluster V All wards with Dependence who do not fall into Cluster I-Cluster III N=219			27%	
Alcohol Dependence	40%	44%	43%	8% DSM
Substance Dependence	67%	58%	59%	
Conduct Disorder	92%	94%	93%	2-9% under age 18, DSM
Antisocial Personality Disorder	91%	92%	92%	1% females 3% males, DSM
Narcissistic	8%	8%	8%	<1% DSM
Disruptive Behavior	94%	95%	95%	
Internalizing Disorders	64%	29%		
Externalizing Disorders	96%	97%	97%	
Mean Comorbidity	5dx	4dx	4dx	
Mean Comorbidity of Clusters	1	1	1	

[1]American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington, DC, American Psychiatric Association, 1994.

Table 2. Comparison of psychopathology across previous studies of incarcerated juveniles.

Criteria	Georgia DISC-2	South Carolina DISC-PC 2.3	CYA SCID N=790	General Population[2,3]
Mean Comorbidity		2.4 (2.7)	4 (2.1)	0
Mood (Mania/Bipolar & Depression)	19%	24%	12%	.5-6%
Anxiety	30%	33%	31%	8.7% AACAP
Psychosis		45%	4%	1%
Substance Use Disorders	30%	20%	85%	4.9% for alcohol dependence 1.9% for illicit drug dependence[1]
Disruptive Behavior	35%	43%	95%	4-20%
ODD	13%		27%	2-16% DSM
ADHD	7%		10%	3-5% DSM
Conduct Disorder	29%		93%	2-9% under age 18, DSM

[2]American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington, DC, American Psychiatric Association, 1994.
[3]Folsom, RE, Judkins, DR. (1997). Substance abuse in states and metropolitan areas: Model-based estimates from the National Household Surveys on Drug Abuse. Rockville, MD: SAMHSA Office of Applied Studies.

Table 3a. WAI Distress Scores Controlling for Age and Gender

WAI Distress	No/Yes	N	Mean	F value	**Sig**
Cluster 1:	No	343	2.134	84.051	.000
	Yes	350	2.591		
Cluster II	No	584	2.299	32.717	.000
	Yes	109	2.718		
Cluster III	No	655	2.344	10.036	.002
	Yes	38	2.721		
Cluster IV	No	184	2.124	0.002	.962
	Yes	140	2.139		
Cluster V	No	129	2.035	8.023	.005
	Yes	195	2.194		

Table 3b. WAI Restraint Scores Controlling for Age and Gender

WAI Restraint	No/Yes	N	Mean	F value	**Sig**
Cluster 1:	No	343	3.512	61.410	.000
	Yes	350	3.110		
Cluster II	No	584	3.384	43.045	.000
	Yes	109	2.906		
Cluster III	No	655	3.313	.726	.395
	Yes	38	3.236		
Cluster IV	No	185	3.539	0.251	.617
	Yes	139	3.480		
Cluster V	No	130	3.624	8.361	.004
	Yes	194	3.440		

Table 3c. MAYSI Composite Scores Controlling for Age and Gender

MAYSI Composite	No/Yes	N	Mean	F value	**Sig**
Cluster 1:	No	354	1.4985	95.900	.000
	Yes	356	2.3121		
Cluster II	No	607	1.7698	60.172	.000
	Yes	112	2.6846		
Cluster III	No	680	1.8673	16.176	.000
	Yes	39	2.6827		
Cluster IV	No	189	1.4418	0.173	.678
	Yes	145	1.5014		
Cluster V	No	134	1.1871	21.322	.000
	Yes	200	1.6556		

Table 4. Summary of logistic regression of clustered diagnoses by instrument.

Instrument	Chi-square	Chi-square P value	Cox & Snell R Square	Variables Picked[1]	Odds Ratio Exp (B)	False Negatives	False Positives	Percent Correct
Cluster 1: Mood Anxiety Cluster B2 ODD								
MAYSI N=708	141.567	.000	.181	Anger Anxiety Age	1.137 1.280 0.860	17.5%	14.4%	68.1%
WAI & DEQ N=642	160.216	.000	.221	Depression SpAggression Age	1.865 0.744 0.842	15.6%	14.2%	70.1%
YSR & DEQ N=666	139.502	.000	.189	Age Anxiety	0.843 1.045	18.1%	12.2%	69.7%
MAYSI, WAI, & DEQ N=636	171.370	.000	.236	Age Depression	0.809 1.591	15.1%	13.8%	71.1%
Cluster II ADHD Psychosis Cluster A								
MAYSI N=708	81.732	.000	.109	Anxiety	1.218	12.8%	1%	86.2%
WAI & DEQ N=642	92.342	.000	.134	Low Self Impulsivity Consideration Age	1.463 0.608 0.035 0.802	12.9%	1.7%	85.4%
YSR DEQ N=666	82.464	.000	.116	Age Attention Gender	0.750 1.062 1.95	12.6%	1.7%	85.7%
MAYSI, WAI, & DEQ N=636	112.665	.000	.162	Age Consideration Anxiety	0.793 0.663 1.255	10.8%	1.5%	87.6%

Cluster III Somatoform Eating Adjustment								
MAYSI N=708	39.250	.000	.054	SomaticComp	1.274	5.5%	<1%	94.4%
WAI & DEQ N=642	28.021	.003	.043	Depression	1.733	5.4%	0%	94.5%
YSR & DEQ N=666	26.418	.006	.039	Anxiety	1.064	5.4%	<1%	94.4%
MAYSI, WAI, & DEQ N=636	38.160	.004	.058	SomaticComp	1.225	5.3%	<1%	94.5%
Cluster IV All wards with Abuse who do not fall into Cluster I-Cluster III								
MAYSI N=708	43.448	.000	.060	Gender	0.484	22.1%	0%	79.9%
WAI & DEQ N=642	49.950	.000	.074	Depression Responsibility Gender	0.650 0.612 0.407	19.6%	0%	80.4%
YSR & DEQ N=666	47.629	.000	.069	Gender	0.75	20.1%	0%	79.9%
MAYSI, WAI, & DEQ N=636	53.318	.000	.080	Responsibility Gender	0.617 0.485	19.3%	<1%	80.5%
DEQ N=366	10.331	.016	.033	Gender not sig Age DEQ	 0.753 1.029	8.7%	25.7%	59.4%
Cluster V All wards with Dependence who do not fall into Cluster I-Cluster III								
MAYSI N=331	33.371	.000	.096	Substance Anxiety Gender	1.182 1.374 1.329	11.7%	22.3%	65.9%

WAI & DEQ N=299	67.092	.000	.201	DEQ Age Gender	1.130 1.306 1.034	11.7%	18.4%	69.9%
YSR & DEQ N=309	63.759	.000	.186	Age DEQ Gender	1.294 1.129 1.086	11.9%	17.7%	70.2%
MAYSI, WAI, & DEQ N=298	77.241	.000	.228	Age DEQ Gender	1.311 1.123 1.212	11.1%	16.1%	72.8%
DEQ N = 366	59.810	.000	.175	Gender not sig Age DEQ	 1.294 1.121	14.5%	10.4%	70.6%

BLANK PAGE

Table 5. Mental health[1] staffing patterns by CYA institution.

Classification	DWNYCF	EPDRYCF	FCNYCF	HGSYCF	KHYCDATF	NACYCF	NYCRCC	OHCYCF	PYCF	SYRCC	VYCF	**Total *N***
Psychiatrist												
Authorized	2	.5	1	3	1	1	1	1	3	1	5	19.5
Filled	1	.5	1	2	1	1	1	1	1	1	3.5	14
Psychologist												
Authorized	1	2	3	11	4	5	2	4	5	5	11	53
Filled	1	1	2.5	7	3	5	2	4	4.5	4	10	44
RN, MTA[2,3]								§				
Authorized	§	§	7	9	3	2	5		13	1	12	56.50
Filled			4	8	3	2	5		12	1.4	11.5	46.9
Program Administrator												
Authorized	0	1	1	4	1	0	1	1	4	1	2	16
Filled	0	1	1	4	1	1	1	1	3	1	2	16
Supervising Casework Specialist (MSW)												
Authorized	0	0	2	1	0	0	2	1	3	0	2	11
Filled	0	0	2	0	0	0	2	1	1	0	1.5	7.5
Casework Specialist (CSW/MSW)												
Authorized	0	0	2	2	0	0	9	1	0	2	1	15
Filled	0	0	0	0	0	0	6	1	0	2	1	10
Treatment Team Supervisor												
Authorized	6	5	6	11	4	0	1	1	11	0	7	52
Filled	6	6	5	8	4	0	1	0	11	0	7	48
Senior YCC												
Authorized	9	18	14.7	25	8	14	2	2	26	1	13	92.7
Filled	9	18	13	22	7	12	2	2	26	1	13	86
YCC							§					
Authorized	62	105	124	157	44			12	109	11	31	655
Filled	62	94	97	130	44			5	99	11	26	568
						§						
Total FTE Authorized[3]	161.50	368	423.7	353	146		34		265.3	31	98	2150
Total FTE Filled	161.50	348	360	306	144		32.75		247.5	30	88.5	1983.75 (92.3%)

[1]Staff primarily involved in the delivery of program services.
[2]Medical Technical Assistant, CF.
[3]Staff estimates for each classification provided by individual program by institution. Numbers may not correspond with information provided by CYA Personnel Division in headquarters. For example, there are 9 Staff Psychiatrists for 14.75 FTEE established positions while Nurse staff vacancies number 13 out of 92 positions according to Vacancy Summary as of July 30, 2001, Health Care Services Division, Department of the Youth Authority)
[4]Some staff omitted from the table
[§]Up-to-date information could not be obtained or verified

Table 6. Detailed Comorbidity by Institution.

Institution													
	0 dx	**1 dx**	**2 dx**	**3 dx**	**4 dx**	**5 dx**	**6 dx**	**7 dx**	**8 dx**	**9 dx**	**10 dx**	**11 dx**	**14 dx**
Northern Clinic			2	3	3	1		1	1	1			
			16.7%	25.0%	25.0%	8.3%		8.3%	8.3%	8.3%			
Southern Clinic			1	3	2	1	1	2					
			10.0%	30.0%	20.0%	10.0%	10.0%	20.0%					
Chaderjian	2	1	1	17	9	5	4	4	1	1	1		
	4.3%	2.2%	2.2%	37.0%	19.6%	10.9%	8.7%	8.7%	2.2%	2.2%	2.2%		
Nelles	3	8	7	35	27	16	4	4	2	6			1
	2.7%	7.1%	6.2%	31.0%	23.9%	14.2%	3.5%	3.5%	1.8%	5.3%			.9%
OH Close	2		3	18	11	6	5		1				
	4.3%		6.5%	39.1%	23.9%	13.0%	10.9%		2.2%				
Paso	2	7	16	40	27	13	8	3	1	1	1	1	
	1.7%	5.8%	13.3%	33.3%	22.5%	10.8%	6.7%	2.5%	.8%	.8%	.8%	.8%	
Karl Holton		2	3	27	10	8	2	4	2				
		3.4%	5.2%	46.6%	17.2%	13.8%	3.4%	6.9%	3.4%				
DeWitt Nelson			3	10	3	3	2				1		
			13.6%	45.5%	13.6%	13.6%	9.1%				4.5%		
Preston	1	2	11	36	16	7	5	3	3	1	1		
	1.2%	2.3%	12.8%	41.9%	18.6%	8.1%	5.8%	3.5%	3.5%	1.2%	1.2%		
HG Stark		1	2	12	6	2	3	1				1	
		3.6%	7.1%	42.9%	21.4%	7.1%	10.7%	3.6%				3.6%	
Ventura	1	7	11	37	24	33	19	7	14	13	3	3	
	.6%	4.1%	6.4%	21.5%	14.0%	19.2%	11.0%	4.1%	8.1%	7.6%	1.7%	1.7%	
Ben Lomond			1	3	2								
			16.7%	50.0%	33.3%								
Mt. Bullion			3	4	2								
			33.3%	44.4%	22.2%								
Pine Grove		1	1	2									
		25.0%	25.0%	50.0%									
Wash Ridge		1	1	11									
		7.7%	7.7%	84.6%									
Ventura Camp			1	2	4								
			14.3%	28.6%	57.1%								
San Jose				1									
				100.0%									
Jefferson					1								
					100.0%								
East LA						1							
						100.0%							
South Coast								1					
								100.0%					
								.1%					
San Diego			1										
			100.0%										

Table 7. Psychopathology by institution.

	N	Comorbidity per Institution: Mean	Standard. Deviation	% of institution with Cluster I	% of institution with Cluster II	% of institution with Cluster III	% of institution with Cluster V
Total	757						
Northern Clinic	12	4.5	2.3	2.0	2.6	1.3	0.5
Southern Clinic	10	4.4	1.8	1.3	2.6	0.7	1.5
Chaderjian	46	4.2	2.1	6.6	8.6	4.6	5.9
Nelles	113	4.0	2.2		**17.2**	11.1	
OH Close	46	3.7	1.5	5.9	5.2	8.5	4.4
Paso		3.7	1.8	13.0		**17.0**	**18.2**
Karl Holton	58	3.9	1.6	6.9	6.9	9.8	12.8
DeWitt Nelson	22	3.9	1.8	2.3	1.7	4.6	4.4
Preston	86	3.7	1.8	10.5	5.2	**17.6**	**12.3**
HG Stark	28	4.0	1.9	2.8	2.6		4.9
Ventura	172	5.0	2.4	**30.4**	**31.0**	**13.1**	**14.8**

Table 8. Referrals to Specialized Program by Cluster

Cluster	**Any known moves to an ITP or SCP. Percent of wards within cluster**
Cluster I	27.0%
Cluster II	37.2%
Cluster III	32.6%
Cluster IV	8.9%
Cluster V	10.1%

Table 9. Distribution of Psychopathology by Institution

Cluster	Living Unit	Percent of wards in the living unit with each cluster	Percent of wards within each cluster in each institution
Cluster I		**66.7%**	2.0%
N=757	Southern Clinic		1.3%
No=366	Chaderjian	**56.5%**	
Yes=391	**Nelles**	55.8%	**16.1%**
	OH Close		5.9%
	Paso	42.5%	
	Holton	46.6%	6.9%
	Nelson	40.9%	2.3%
	Preston	47.7%	10.5%
	Stark	39.3%	2.8%
	Ventura	**69.2%**	**30.4%**
Cluster II	**Northern Clinic**	**25.0%**	2.6%
N=757	**Southern Clinic**	**30.0%**	2.6%
No=641	Chaderjian	**21.7%**	8.6%
Yes=116	**Nelles**	17.7%	**17.2%**
	OH Close	13.0%	5.2%
	Paso	14.2%	14.7%
	Holton	13.8%	6.9%
	Nelson	9.1%	1.7%
	Preston	7.0%	5.2%
	Stark	10.7%	2.6%
	Ventura	20.9%	**31.0%**
Cluster III	Northern Clinic	**8.3%**	2.2%
N=757	Southern Clinic	0.0%	0%
No=712	**Chaderjian**	6.5%	**6.7%**
Yes=45	Nelles	3.5%	3.5%
	OH Close	0.0%	0.0%
	Paso	1.7%	4.4%
	Holton	4.5%	0.0%
	Nelson		2.2%
	Preston	**7.1%**	**6.7%**
	Stark	**7.1%**	4.4%
	Ventura	**15.1%**	**57.8%**
Cluster IV	Northern Clinic	50.0%	1.3%
N=366	Southern Clinic	25.0%	0.7%
No=189	Chaderjian	36.8%	4.6%
Yes=153	Nelles	37.8%	11.1%
	OH Close	**59.1%**	8.5%
	Paso	40.0%	**17.0%**
	Holton	48.4%	9.8%
	Nelson	**53.7%**	4.6%
	Preston	**60.0%**	**17.6%**
	Stark	46.7%	4.6%
	Ventura	42.6%	**13.1%**
Cluster V	Northern Clinic	25.0%	0.5%
N=366	Southern Clinic	**75.0%**	1.5%
No=139	Chaderjian	63.2%	5.9%
Yes=203	Nelles	46.7%	10.3%
	OH Close	40.9%	4.4%
	Paso	56.9%	**18.2%**

Holton	**83.9%**	12.8%
Nelson	**69.2%**	4.4%
Preston	55.6%	**12.3%**
Stark	66.7%	4.9%
Ventura	63.8%	**14.8%**

Table 10. Required FTE.

	Females N=248			Males N=4353			
	% in TNA	Projected # in CYA General Population (GP)	FTE Required	% in TNA	Projected # in CYA GP	FTE Required	**Total FTE Required**
CD	92%	228	11 CM[6]	94%		205 CM	**216 CM**
Cluster 1:	73%	181	6 Therapists[7](T) 3 Psychiatrists[8](MD)	46%	2002	67 T[9] 13.7 MD[10]	**70 T** **16.7 MD**
Cluster II	24%	60	0.25 T 1.0 MD	13%	566	2.3 T 7 MD	**2.5 T** **8 MD**
Cluster III	15%	37	.08 PhD		174	0.4 PhD	**1.2 T**
Cluster IV	10%	25	None	22%	958	None	
Cluster V	14%	35	0.1 T	30%	1306	5.4 T 5.4 MD	**5.5 T** **5.5 MD**
TOTAL			0.2				**79 T**

[6]20 cases per Case Manager
[7]MA/PhD no more than 30 contact hours per week: 30 sessions.
[8]MD no more than 30 contact hours per week: 60 sessions.
[9]MA/PhD no more than 30 contact hours per week: 30 sessions.
[10]MD no more than 30 contact hours per week: 60 sessions.
[12] *N* reflects only wards between 11 and 19 years old.

Table 11. Detailed Required FTE. [12]

	Females N=248				Males N=4353		
	% in TNA	Number in CYA General Population	Therapy	FTE Required	% in TNA	Number in CYA General Population	FTE Required
CD	92%	228			94%		205 CM
Cluster 1: Mood Anxiety Cluster B2 ODD	73%		6 months of CBT 1hr x week; 3 months of psychiatric consultations 30min x week; 9 months of 30 min/month	6 Therapists Psychiatrists[13]	46%	2002	Therapists[14] Psychiatrists[15]
Cluster II ADHD Psychosis Cluster A	24%	60	12 months of group[16]Psychosocial therapy 1hr x week; 3 months of psychiatric consultations 30min x week, 21 months of psychiatric consults 30min x month.	0.25 Therapists 1.0 Psychiatrists Per week	13%	566	2.3 Therapists 7 Psychiatrists Per year Per week
Cluster III Somatoform Eating Adjustment	15%	37	3 hours with a psychologist	.08 PhD	4%	174	0.4 PhD
Cluster IV All wards with **Abuse** who do not fall into Cluster I-Cluster III	10%	25	Nothing		22%	958	Nothing
Cluster V All wards with **Dependence** who do not fall into Cluster I-Cluster III	14%	35	12 months of group therapy 1 x week, 12 months of psychiatric consultations 30min 1x month	0.3 Therapists 0.1 Psychiatrists	30%	1306	5.4 Therapists 5.4 Psychiatrists

[11]20 cases per Case Manager
[12]MA/PhD no more than 30 contact hours per week: 30 sessions.
[13]MD no more than 30 contact hours per week: 60 sessions.
[14]MA/PhD no more than 30 contact hours per week: 30 sessions.
[15]MD no more than 30 contact hours per week: 60 sessions.

[12] *N* reflects only wards between 11 and 19 years old.
[16]Groups consist of no more than 8 wards.